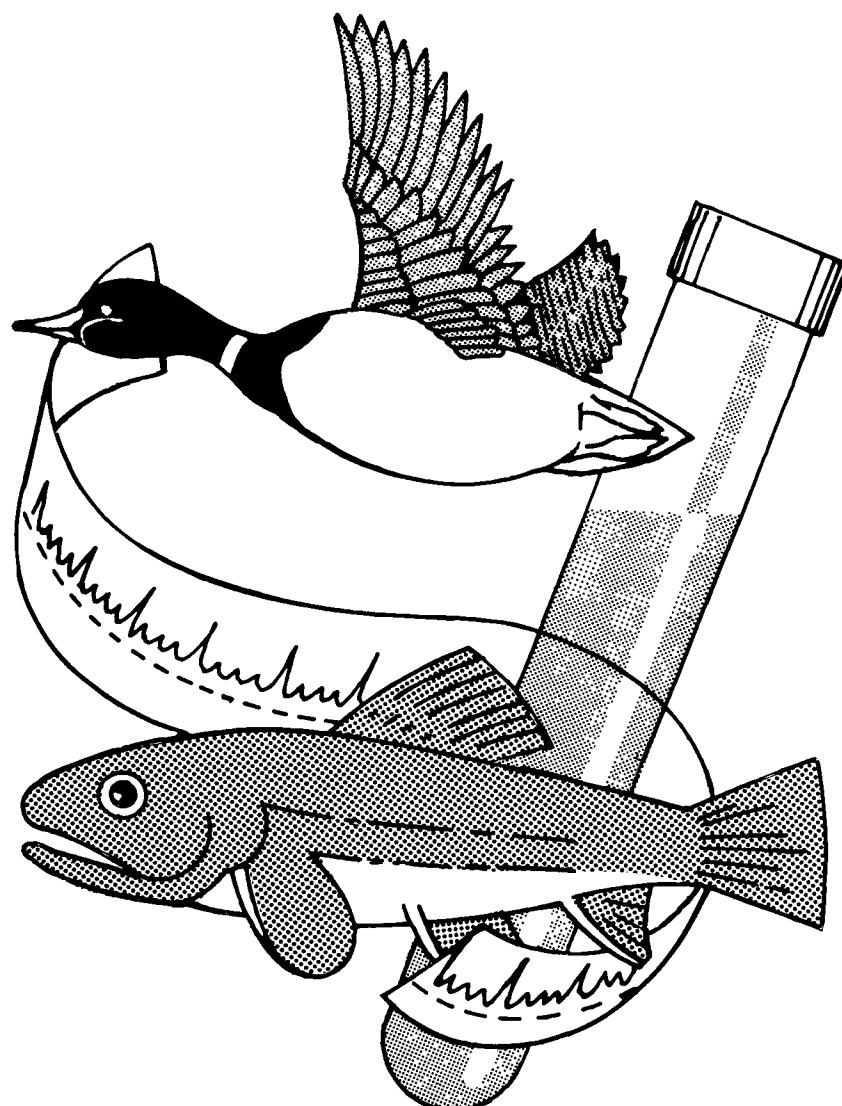


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Chemicals Identified in Feral and Food Animals, A Data Base

First Annual Report
October 1981



Volume I

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A DATA BASE

First Annual Report, October 1981
Volume I
Records 1-532

Compiled by

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Information Center Complex
Information Division
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Oak Ridge, Tennessee 37830
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of the Interagency Collaborative Group on
Environmental Carcinogenesis, National Cancer
Institute, National Institutes of Health,
Chairperson, Dr. Herman F. Kraybill.

Date Published — December, 1981

Cindy Stroup, Project Officer
Design and Development Branch
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For his support and valuable advice, the U.S. Environmental Protection Agency project officer expresses special thanks to Dr. Herman F. Kraybill, the National Cancer Institute coproject officer and the chairperson of the Interagency Collaborative Group on Environmental Carcinogenesis (ICGEC). In addition, thanks are due the members of the ICGEC Task Group on Chemicals in Human Tissues.

INTRODUCTION

A comprehensive data base of chemicals identified in feral and food animals has been established under the direction of the Exposure Evaluation Division in the U.S. Environmental Protection Agency's Office of Toxic Substances. This effort has grown out of the concern over continuing reports of toxic chemicals in human tissues and body fluids. Feral populations and food animals are regarded as indicators of environmental contamination and subsequent human body burden.

This data file is a companion to *Chemicals Identified in Human Biological Media, A Data Base*, and follows basically the same format. The data base on human body burden is in its third year of publication. This is the first annual report for the feral and food animal file.

Data were obtained primarily from the open literature through manual searches (retrospective to 1979) of the journals listed in Appendix A. The data base now contains information on 60 different substances. Chemicals are listed by Chemical Abstracts Service (CAS) registry numbers and preferred names in Appendix B. For the user's convenience, cross-referenced chemical lists of CAS preferred and common names are provided in Appendix C. The animals, tissues, and body fluids found to be contaminated by these chemicals are listed in Appendix D.

The data base is published annually in tabular format with indices and chemical listings that allow specific searching. A limited number of custom computer searches of the data base are available in special cases when the published format does not allow for retrieval of needed information.

It should be emphasized that the purpose of the data base is to provide a centralized resource of animal residue data and in no way is intended to obviate the need for the user to ultimately refer to the original literature or data source. It is not the intent of this program to conduct any screening or evaluation of the data.

This data base was established under the aegis of the Interagency Collaborative Group on Environmental Carcinogenesis (ICGEC), National Cancer Institute. Funding is through the National Cancer Institute-Environmental Protection Agency Collaborative Program. The work is

being done by the Oak Ridge National Laboratory's Chemical Effects Information Center, Information Center Complex, through interagency agreements involving the National Cancer Institute, the Environmental Protection Agency, and the Department of Energy. Members of the ICGEC Task Group on Chemicals in Human Tissues provide support to the program's activities. Agencies represented by members of the task group include the Armed Forces Institute of Pathology, the Centers for Disease Control, the Department of Agriculture, the Department of Energy, the Environmental Protection Agency, the Food and Drug Administration, the National Bureau of Standards, the National Cancer Institute, the National Center for Toxicological Research, the National Institute for Environmental Health Sciences, the National Institute for Occupational Safety and Health, and the National Library of Medicine.

Comments by the users of this document are invited. Questions, comments, and requests for additional information about the data base and/or searches thereof should be directed to:

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USERS' GUIDE

The data base will be published annually. The document contains introductory materials, references, appendices, indices, and a chemical directory and animal residue data extracted from the source documents. Data from 65 of the over 300 documents collected to date have been entered in the data base as of October 1981.

When appropriate articles are identified, data are extracted and entered in the data base by chemical, animal, and tissue/body fluid. Each data entry comprises a single record (or line entry) and is assigned a record number. If a particular document deals with more than one animal and/or chemical and/or tissue, there will be multiple records for that document. For example, a study of 5 chemicals in each of 3 tissues in 2 animals has 30 different records (or 30 line entries) in the data base with 30 record numbers. Record numbers are assigned consecutively throughout the entire data base and appear in the upper left corner in the first column for each record.

The data base is in tabular format and arranged alphabetically by CAS preferred chemical name. The sample record below illustrates the format. The chemical, in this case copper, is given along with its CAS registry number, formula, atomic weight, melting point, boiling point, and vapor pressure. The common name of the animal is listed alphabetically below the chemical data, followed by taxonomic names when available.

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628C, 10 mm Hg at 1870 C
Mule deer
ODOCOILEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
154 Liver		AAS	a) 12 b) 6	a) 19-114 ppm b) 45-227 ppm	a) 61.4±34 ppm b) 97.3±59.6 ppm	a) Adults, 1.5 yr & older b) Fawns, 0.5 yr Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rico Blanco County, Piceance Creek Basin DEER MICE; MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; BONES; KIDNEYS; LIVER	Stetler, L.H. 1980 J. Wildlife Diseases 18(2):175-182

Tissues are listed alphabetically in the first column with the record number. In the sample record, the tissue is liver and the record number is 154.

Information in the next five columns — exposure route, analytical method, number of cases, range, and mean — is self-explanatory and is provided when available in the source document. A list of abbreviations used for analytical method is provided on page 7. Exponential values are written as in the following example: 5×10^{-15} is $5 \times 10(E-15)$. All means are arithmetic unless designated geometric. When included, standard error is indicated by S.E. However, values for standard deviations, when given, have no such designations. When only graphically displayed data were available, values have been estimated by the extractor and so indicated in the table under GENERAL INFORMATION.

In the GENERAL INFORMATION column, a variety of information may be included that is pertinent to the range and mean as well as experimental design, geography, health effects, pathology, morphology, and toxicity. In general, supporting information deemed important for understanding the data presented appears in this column.

The REFERENCE column includes author(s), publication date, and source. Complete literature citations are listed alphabetically by author in References for Data Base, page 9.

Because not all details of the research can be included in this publication, keywords, in uppercase, are provided for further insight into important aspects of the source documents. The use of a different chemical as a keyword indicates studies on that chemical were also reported in the same document. For example, CADMIUM may appear as a keyword in a record on mercury when the work includes data on both chemicals. In the same way, a different tissue occurring as a keyword indicates the document also deals with that tissue.

CAS preferred names are from the *Ninth Collective Index*, and, when different, names from both eighth and ninth indices (8 CI, 9 CI) are given. Appendix C provides cross-referenced alphabetical lists of commonly used synonyms paired with the CAS preferred names.

For accessing information in the data base when only the CAS registry number is known, the user should refer to Appendix B, which lists CAS

registry numbers coupled with the preferred names. For help in locating chemicals in the tabular portion of the documents, an alphabetically arranged directory of chemicals by CAS names and record numbers is provided just before the Data Base. The second part of the directory lists formulas alphabetically along with the corresponding CAS preferred names and record numbers. Indices by author, corporate author, animals and tissues, tissue or body fluid, geography, and keywords refer the user to the appropriate record number.

ABBREVIATIONS FOR ANALYTICAL METHODS

AAS	Atomic absorption spectrometry
APDC-MIBK	Ammonium pyrrolidine diethiocarbamate-methylisoburyl ketone extraction
ASV	Anodic stripping voltammetry
CC	Column chromatography
Chem	Chemical methods
Electrochem	Electrochemical methods
EM	Electron microscopy
ES	Emission spectrometry
GC	Gas chromatography
GC-EC	Gas chromatography; electron-capture detection
GC/MF	Gas chromatography coupled with mass fragmentography
GC/MS	Gas chromatography coupled with mass spectrometry
Histochem	Histochemistry
HPLC	High-pressure liquid chromatography
IR	Infrared analysis
ISE	Ion-specific electrode
MAS	Molecular absorption spectrophotometry
MED	Microwave emission detector (ion)
MS	Mass spectrometry
NA	Neutron activation
NMR	Nuclear magnetic resonance
PIXE	Proton induced X-ray emission
RIA	Radioimmunoassay
TLC	Thin-layer chromatography
UV	Ultraviolet analysis
X-ray fluores	X-ray fluorescence
X-ray spectrom	X-ray spectrometry

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Animal Ecology, Journal of
Animal Science, Journal of
Aquaculture
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Canadian Veterinary Journal
Chemosphere
Comparative Pathology, Journal of
Cornell Veterinarian
Ecotoxicology and Environmental Safety
Environmental Health Perspectives
Environmental Pollution, Series A (Ecological & Biological)
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Environmental Science and Health, Journal of
Environmental Science and Technology
Fish Diseases, Journal of
Food and Cosmetics Toxicology
International Journal of Environmental Studies
Nature
Nutrition, Journal of

Pesticides Monitoring Journal
Residue Reviews
Science
Science of Food and Agriculture, Journal of
Science of the Total Environment
Toxicology and Applied Pharmacology
Toxicology and Environmental Health, Journal of
Tropical Animal Health and Production
Veterinary Clinical Pathology
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Wildlife Society Bulletin
Xenobiotica

APPENDIX B

Chemicals in Data Base
(by CAS Registry Numbers and Preferred Names)

- 10045-97-3 Cesium, isotope of mass 137
- 1024-57-3 4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
- 11096-82-5 Aroclor 1260
- 11097-69-1 Arochlor 1254
- 118-74-1 Benzene, hexachloro-
- 12674-11-2 Aroclor 1016
- 129-00-0 Pyrene
- 1336-36-3 Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)
- 13981-52-7 Polonium, isotope of mass 210
- 13982-63-3 Radium, isotope of mass 226
- 14255-04-0 Lead, isotope of mass 210
- 14269-63-7 Thorium, isotope of mass 230
- 143-50-0 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-
- 1746-01-6 Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)
- 22967-92-6 Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)
- 2385-85-5 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-
- 26880-48-8 4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)
- 27577-90-8 Pyrene, methyl-
- 319-84-6 Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclotexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
- 330-54-1 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)
- 39765-80-5 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonacloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3alpha,4beta,7beta,7alpha)-
- 50-29-3 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
- Total DDT (No postings in CHEMLINE).
- 50-32-8 Benzo(a)pyrene
- 5103-71-9 4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3alpha,4beta,7beta,7alpha)- (9 CI)

5103-73-1	<i>4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3alpha,4,7,7-aalpha-tetrahydro-</i> (8 CI); <i>4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro- (1alpha,2alpha,3alpha,3alpha,4beta,7aalpha-</i> (9 CI)
53-19-0	Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)
55-38-9	Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)
56-55-3	Benz(a)anthracene
57-68-1	Sulfauilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
60-57-1	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)
70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-
72-54-8	Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
72-55-9	Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
7377-03-9	Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)
7439-69-6	Iron
7439-92-1	Lead
7439-96-5	Manganese
7439-97-6	Mercury
7439-98-7	Molybdenum
7440-02-0	Nickel
7440-22-4	Silver
7440-38-2	Arsenic
7440-42-8	Boron
7440-43-9	Cadmium
7440-47-3	Chromium
7440-48-4	Cobalt
7440-50-8	Copper
7440-61-1	Uranium
7440-66-6	Zinc

7553-56-2 Iodine

76-44-8 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI);
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

7782-41-4 Fluorine

7782-49-2 Selenium

8001-35-2 Toxaphene

8001-58-9 Creosote

87-86-5 Phenol, pentachloro-

93-76-5 Acetic acid, (2,4,5-trichlorophenoxy) -

Acetic acid, (2,4,5-trichlorophenoxy)-

BCF-Bushkiller; Fortex; Forst U 46; Trioxon; Verton 2T; Verton 2-T; 2,4,5-T;
(2,4,5-Trichlorophenoxy)acetic acid

Arochlor 1254

Aroclor 1254; PCB 1254

Aroclor 1016

Aroclor 1016

Aroclor 1260

Arochlor 1260; PCB 1260

Arsenic

Arsenic; Arsenic-75; Arsenic black; Grey arsenic; Metallic arsenic

Benz(a)anthracene

Benzanthracene; Benzoanthrene; Benzoanthracene; Benzo(a)anthracene; Benzo(b)phenanthrene; Tetraphene;
1,2-Benzanthracene; 1,2-Benz(a)anthracene; 1,2-Benzoanthrene; 1,2-Benzoanthracene; 2,3-Benzophenanthrene

Benzene, hexachloro-

Amatin; Anticarie; Bunt-cure; Bunt-no-more; Co-op Hexa; HCB; Hexachlorobenzene; Julin's carbon chloride;
No Bunt; No Bunt Liquid; No Bunt 40; No Bunt 80; Pentachlorophenyl chloride; Perchlorobenzene; Sanocide;
Snieciotox

Benzo(a)pyrene

Benz(a)pyrene; Benzo(d,e,f)chrysene; BP (VAN); 3,4-Benzo(a)pyrene; 3,4-Benzopyrene; 3,4-Benzopyrene
[carcinogen]

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

PCB; Biphenyl, chlorinated; Chlorinated diphenyl

Boron

Boron

Cadmium

Cadmium; C.I. 77180

Cesium, isotope of mass 137

Cesium-137

Chromium

Chromium

Cobalt

C.I. 77320; Cobalt; Cobalt-59

Copper

Allbri Natural Copper; Anac 110; Arwood copper; CDA 101; CDA 102; CDA 110; CDA 122; C.I. Pigment Metal 2;
C.I. 77400; CuEP; CuEPF; Cu M3; Copper; Copper M 1; Copper powder; DCuP1; E-Cu57; Kafar copper; M1
{copper}; M2 {copper}; M3 {copper}; M4 {copper}; M31; M3S; M 1; M 3; M 4; OFHC Cu; Raney copper; 1721 Gold

Creosote

Coal tar creosote; Creosote from coal tar; Creosote oil

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-BHC; alpha-Benzene hexachloride; alpha-HCH; alpha-Hexachloran; alpha-Hexachlorane; alpha-Hexachlorocyclohexane; alpha-Hexachlorocyclohexane; alpha-Lindane; alpha-1,2,3,4,5,6-Hexachlorocyclohexane; alpha-1,2,3,4,5,6-Hexachlorocyclohexane

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Alindan; Aficide; Agrocide; Agrocide III; Agrocide WP; Ameisentod; Ameisenmittel merk; Aparasin; Aphtiria; Aplidal; Arbitex; BBH; Ben-Hex; Bentox 10; Bexol; BHC; Celanex; Chloresene; Codechine; DBH; Detmol-Extrakt; Devoran; Dol Granule; Drilltox-Spezial Aglukon; Entomoxan; ENT 7,796; Forst-Nexen; Gamma benzene hexachloride; gamma-Benzene hexachloride; gamma-BHC; gamma-HCH; gamma-Hexachloran; gamma-Hexachlorane; gamma-Hexachlorobenzene; gamma-Hexachlorocyclohexane; gamma-Lindane; Gammater; gamma-1,2,3,4,5,6-Hexachlorocyclohexane; Gexane; HCC; HCCH; Heclotox; Hexa; Hexachloran; Hexachlorane; Hexaverm; Hexicide; Hexyclan; HGI; Hortex; Hungaria L 7; Jacutin; Kokotine; Kwell; Lendine; Lenton; Lidenal; Lindane; Lindatox; Lindex; Lindosep; Lintox; Linvur; Loxane; Millol 49; Mszycol; Neo-Scabidol; Nexen FB; Nexit; Nexit-starck; Nerox-E; Nicochloran; Omnitox; Ovadziak; Owadziak; Pedraczak; Pflanzol; Quellada; Sang-gamma; Spritz-Rapidin; Spruehpflanzol; Streunex; Tap 85; Tri-6; Vitol; 1,2,3,4,5,6-Hexachlorocyclohexane; 666

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e) (1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

Dioxin [herbicide contaminant]; TCDD; TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin; 2,3,7,8-Tetrachlorodibenzo-1,4-dioxin; 2,3,7,8-Tetrachlorodibenzo-p-dioxin

Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

CB 313; Chioditan; Chlodithane; Lysodren; Mitotan; Mitotane; NSC-38721; o,p'-DDD; o,p'-Dichlorodiphenyl dichloroethane; o,p'-TDE; 2-(2-Chlorophenyl)-2-(4-chlorophenyl)-1,1-dichloroethane; TDE; Tetrachlorodiphenyl ethane; 1,1-Bis(p-chlorophenyl)-2,2-dichloroethane; 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane; 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

DDD; Dichlorodiphenyl dichloroethane; Dilene; Me1700; p,p'-DDD; p,p'-Dichlorodiphenyl dichloroethane; p,p'-Dichlorodiphenyl-2,2-dichloroethylene; p,p'-TDE; Rhothane; TDE; Tetrachlorodiphenyl ethane; 1,1-Bis(p-chlorophenyl)-2,2-dichloroethane; 1,1-Bis(4-chlorophenyl)-2,2-dichloroethane; 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane; 2,2-Bis(4-chlorophenyl)-1,1-dichloroethane; 4,4'-DDD

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Aavero-extra; Agritan; alpha,alpha-Bis(p-chlorophenyl)-beta,beta-trichlorethane; Arkotine; Azotox M-33; Bosan supra; Bovidermol; Chlorphenothane; Chlorphenothan; Chlorphenotoxum; Citox; Clofenotan; Clofenotane ; DDT; Deoval; Detox; Dodat; Dibovin; Dichlorodiphenyltrichloroethane; Dicophane; Dykol; ENT-1506; Estonate; Ethane, 1,1,1-trichloro-2,2-bis(4-chlorophenyl)-; Gesafid; Gesarol; Ivoran; Mutoxan; Neocid; Neocidol; Parachlorocidum; PEE1; Pentachlorin; Penticidum; p,p'-DDT; p,p'-Dichlorodiphenyltrichloroethane; Tafidex; Trichlorobis(4'-chlorophenyl)ethane; Zerdane; 1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethane; 1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane; 1,1,1-Trichloro-2,2-bis(4,4'-dichlorodiphenyl)ethane; 2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane; 4,4'-Dichlorodiphenyltrichloroethane

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

DDE; p,p'-DDE; p,p'-Dichlorodiphenyl dichloroethylene; 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene; 1,1-Dichloro-2,2-di(p-chlorophenyl)ethylene; 2,2-Bis(4-chlorophenyl)-1,1-dichloroethylene; 4,4'-DDE

Fluorine

Fluorine; Fluorine-19

Iodine

Eranol; Iodine; Iodine-127; Iodine ((127)I2); Iodine colloidal; Iodine crystals; Iodine sublimed; Iosan Superdip; Molecular iodine

Iron

Armco iron; Ferrovac E; Iron; Loha; EO5A; PZh2M; PZh2M2; PZh3; PZh1M1; PZh3M; PZh4M; PZh-2; PZh2M1; PZh-1M3; SUY B-2

Lead

C.I. Pigment Metal 4; C.I. 77575; KS-4; Lead; Lead Flake; Lead S2; S0; S1

Lead, isotope of mass 210

Lead-210; Lead of mass 210; Radium D

Manganese

Colloidal manganese; Cutaval; Manganese

Mercury

Mercury; Quicksilver

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury; Methylmercury(1+); Methylmercury(II) cation; Methyl mercury ion; Methylmercury ion(1+)

Molybdenum

MChVL; Molybdenus; Tsm1

Nickel

C.I. 77775; Nickel; Ni 270; Ni 4303T; Ni 0901-S(Harshaw); Nickel NP2; Nickel 270; NP2; Raney alloy; Raney nickel; RCH 55/5

Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

Caprylhydroxamic acid; N-Hydroxyoctanamide; Octanolhydroxamic acid; Taselin

Phenol, pentachloro-

Dowicide 7; EP 30; Fungifen; Grundier Arbezol; Lauxtol; Liroprem; PCP; Penchlorol; Penta; Pentachlorophenol; Permasan; Santophen 20

Phenol, 2,2'-methylenebis[3,4,6-trichloro-

AT 7; G 11; Acigena; Alamedra; Bilevon; Bis(2-hydroxy-3,5,6-trichlorophenyl)methane; Bis(3,5,6-trichloro-2-hydroxyphenyl)methane; B 32; Cotofilm; Distodin; Exofene; Fesia-sin; Fostril; Gamophen; Gamophene; Germa-Medica; Hexablam; Hexachlorofen; Hexachlorophen; Hexachlorophene; Hexafen; Hexophene; Hexosan; Nabac; Neosept V; pHisoHex; Ritosept; Septisol; Septofen; Steral; Steraskin; Surgi-Cen; Surfene; Teraseptic; Trichlorophene; 2,2'-Dihydroxy-3,3',5,5',6,6'-hexachlorodiphenylmethane; 2,2'-Methylenebis(3,4,6-trichlorophenol); 2,2',3,3',5,5'-Hexachloro-6,6'-dihydroxydiphenylmethane; 2,2'-Dihydroxy-3,5,6,3',5',6'-tetrachlorodiphenylmethane

Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio) phenyl) ester (9 CI)

BAY 29493; Baycid; Bayer 9007; Baytex; ENT 25540; Entex; Fenthion; Lebaycid; Mercaptophos (VAN); MPP [pesticide]; MPP (VAN); OMS 2; Phenthion; Queletox; S 1752; Sulfidophos; Talodex; Tiguon

Polonium, isotope of mass 210

Polonium-210; Radium F

Pyrene

Benzo{def}phenanthrene; beta-Pyrene

Pyrene, methyl-

Methylpyrene

Radium, isotope of mass 226

Radium-226

Selenium

C.I. 77805; Selenium

Silver

Argentum; C.I. 77820; L 3; Shell Silver; Silflake 135; Silver; Silver atom; Silver metal; Sr 999; V 9

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

A-502; Azometazin; Cremethazine; Diazil [the sulfanilamide]; Diazil; Diazyl; Dimezathine; Kelametazine; Mefanal; Mermeth; Measina; Neazina; N(1)-(4,6-Dimethyl-2-pyrimidinyl)sulfanilamide; N(1)-(4,6-Dimethyl-2-pyrimidinyl)sulfanilamide; N-(4,6-Dimethyl-2-pyrimidinyl)sulfanilamide; Paramez; Pizazin; Spanbolet; Sulfadimerazine; Sulfadimesin; Sulfadimesine; Sulfadimethyldiazine; Sulfadimethylpyrimidine; Sulfadimezin; Sulfadimesine; Sulfadimidin; Sulfadimidine; Sulfadine; Sulfamethazine; Sulfamethiazine; Sulfamezathine; Sulfifix; Sulfodimesin; Sulfodimesine; Sulmet; S-Mez; Sulphadimethylpyrimidine; Sulphadimidine; Sulphamethasine; Sulphamethazine; Sulphamezathine; Sulphamidine; Sulphadimezein; Superseptyl; Superseptyl; Vertolan; Vertolin; 2-(p-Aminobenzenesulfonido)-4,6-dimethylpyrimidine; 2-Sulfanilamido-4,6-dimethylpyrimidine; 4,6-Dimethyl-2-sulfanilamidopyrimidine

Thorium, isotope of mass 230

Ionium; Thorium-230; Thorium, isotope mass-230

Total DDT (No postings in CHEMLINE).

Total DDT

Toxaphene

Alltox; Anatox; Camphechlor; Camphochlor; Chlorinated camphene; Estonox; Geniphene; Hercules 3956; Kamfochlor; Melipax; M 5055; PCk; Penphene; Phenacide; Phenatox; Polychlorocamphene; Strobane T; Synthetic 3956; Toxakil; Toxaphen; Toxyphen

Uranium

Uranium-238; Uranium I [(238)U]

Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

AF 101; DCMU; Diuron; DMU (VAN); Duran; Herbatox (VAN); HW 920; Karmex; Karmex; Karmex Diuron Herbicide; Karmex DW; Marmer; N-(3,4-Dichlorophenyl)-N',N'-dimethylurea; N'-(3,4-Dichlorophenyl)-N,N-dimethylurea; Telvar Diuron Weed Killer; 1-(3,4-Dichlorophenyl)-3,3-dimethylurea; 1,1-Dimethyl-3-(3,4-dichlorophenyl)urea; 3-(3,4-Dichlorophenyl)-1,1-dimethylurea

Zinc

Blue powder; Zinc

1,3,4-Metheno-1H-cyclobuta(cd) pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

CG-1283; Dechlorane; Dechlorane Plus; Dechlorane Plus 515; Dechlorane 4070; Dechlorane 515; Dodecachlorooctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalene; ENT 25,719; GC 1283; Hexachlorocyclopentadiene dimer; Mirex; Perchlorodihomocubane; Perchloropentacyclodecane; Perchloropentacyclo(5.2.1.0{2,6}.0(3,9).0(5,8))decane; 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-, dimer

1,3,4-Metheno-2H-cyclobuta(cd) pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Chlordecone; Clordecone; Compound 1189; Decachloroketone; Decachloropentacyclo(5.2.1.0{2,6}.0(3,9).0(5).0(8))decan-4-one; Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalen-2-one; ENT-16391; GC 1189; Kepone; Merex

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6alpha,6beta,7beta,7aalpha)- (9 CI)

Aldrin Epoxide; Alvit 55; Compound 497; Dieldrin; Dieldrex; Dielmoth; Dieldrin; Dorytox; ENT-16225; HEOD; Illokol; Insectlack; Kombi-Albertan; Moth Snub D; Octalox; Red Shield; SD 3417; Termitox

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)-

trans-Nonachlor

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI);

2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Octachlor epoxide; Oxychlordan; Oxychlordane

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
2,5-Methano-2H-indeno (1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

ENT 25,584; Epoxyheptachlor; HCE; Heptachlor epoxide; Velsicol 53-CS-17

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7-aalpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7aalpha- (9 CI)
cis-Nonachlor; Nonachlor, cis

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI);
4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,
(1alpha,2alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI)

alpha-Chlordan; alpha-Chlordane; Chlordan, cis-; cis-Chlordan; cis-Chlordane

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Auhepta; Agroceres; E 3314; ENT 15,152; GPKh; Hepta; Heptachlor; Heptachlorane; Rhodiachlor; Velsicol 104;
3-Chlorochlordene

(2,4,5-Trichlorophenoxy)acetic acid
Acetic acid, (2,4,5-trichlorophenoxy)-

A-502

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

A-hepta

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

A-lindan

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

A-vero-extra

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Acigena

Phenol, 2,2'-methylenebis(3,4,6-trichloro-

AF 101

Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Aficide

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agritan

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Agroceres

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Agrocide

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agrocide III

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Agrocide WP

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aldrin Epoxide

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
(1alpha,2beta,2alpha,3beta,6alpha,7beta,7alpha)- (9 CI)

Allbri Natural Copper
Copper

Alltox

Toxaphene

Almedera

Phenol, 2,2'-methylenebis(3,4,6-trichloro-

alpha-Benzen hexachloride

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-BHC

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Chlordan

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3alpha,4,7,7aalpha-tetrahydro (8 CI);
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,
(1alpha,2alpha,3alpha,4beta,7beta,7alpha)- (9 CI)

alpha-Chlordane

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3alpha,4,7,7aalpha-tetrahydro (8 CI);
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,
(1alpha,2alpha,3alpha,4beta,7beta,7alpha)- (9 CI)

alpha-HCH

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachloran

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
(1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-1,2,3,4,5,6-Hexachlorocyclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha-1,2,3,4,5,6-Hexachlororoclohexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

alpha,alpha-Bis(p-chlorophenyl)-beta,beta,beta-trichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Alvit 55
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta,7alpha)- (9 CI)

Amatin
Benzene, hexachloro-

Ameisenmittel merk
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Ameisentod
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Anac 110
Copper

Anatox
Toxaphene

Anticarie
Benzene, hexachloro-

Aparasin
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Aphtria
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Apolidal
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Arbitex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Argentum
Silver

Arkotine
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Armco iron
Iron

Arochlor 1260
Arochlor 1260

Arochlor 1016
Arochlor 1016

Arochlor 1254
Arochlor 1254

Arsenic
Arsenic

Arsenic black
Arsenic

Arsenic-75
Arsenic

Arwood copper
Copper

AT 7
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Azolmetazin
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Azotox M-33
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

B 32
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

BAY 29493
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Baycid
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Bayer 9007
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Baytex
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

BBH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

BCF-Bushkiller
Acetic acid, (2,4,5-trichlorophenoxy)-

Ben-Hex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Bentox 10
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Benz(a)pyrene
Benz(a)pyrene

Benzanthracene
Benz(a)anthracene

Benzanthrene
Benz(a)anthracene

Benzo(a)anthracene
Benz(a)anthracene

Benzo(b)phenanthrene
Benz(a)anthracene

Benzo(d,e,f)chrysene
Benz(a)pyrene

Benzo(def)phenanthrene
Pyrene

Benzoanthracene
Benz(a)anthracene

beta-Pyrene
Pyrene

Bexol
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

BHC
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-
(1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Bilevon
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Biphenyl, chlorinated
 Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

Bis(2-hydroxy-3,5,6-trichlorophenyl) methane
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Bis(3,5,6-trichloro-2-hydroxyphenyl) methane
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Blue powder
 Zinc

Boron
 Boron

Bosan supra
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Bovidermol
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

BP (VAN)
 Benzo(a) pyrene

Bunt-cure
 Benzene, hexachloro-

Bunt-no-more
 Benzene, hexachloro-

C.I. Pigment Metal 2
 Copper

C.I. Pigment Metal 4
 Lead

C.I. 77180
 Cadmium

C.I. 77320
 Cobalt

C.I. 77400
 Copper

C.I. 77575
 Lead

C.I. 77775
 Nickel

C.I. 77805
 Selenium

C.I. 77820
 Silver

Cadmium
 Cadmium

Camphechlor
 Toxaphene

Camphochlor
 Toxaphene

Caprylohydroxamic acid
 Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

CB 313
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

CDA 101
 Copper

CDA 102
 Copper

CDA 110
 Copper

CDA 122
 Copper

Celanex
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Cesium-137
 Cesium, isotope of mass 137

CG-1283
 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Chloditan
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Chlodithane
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Chlordan, cis-
 4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI);
 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,
 (1alpha,2alpha,3alpha,4beta,7beta,7aalpha)- (9 CI)

Chlordecone
 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Chloresene
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Chlorinated camphene
 Toxaphene

Chlorinated diphenyl
 Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

Chlorophenothane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chlorophenothan
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chlorphenotoxum
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Chromium
 Chromium

cis-Chlordan
 4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI);
 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,
 (1alpha,2alpha,3alpha,4beta,7beta,7aalpha)- (9 CI)

cis-Chlordane
 4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,7,7aalpha-tetrahydro (8 CI);
 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-,
 (1alpha,2alpha,3alpha,4beta,7beta,7aalpha)- (9 CI)

cis-Nonachlor
 4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,7,7aalpha-tetrahydro- (8 CI);
 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,4beta,7beta,7aalpha)- (9 CI)

Citox
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Clofenotan
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Clofenotane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Clordecone
 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Co-op Hexa
 Benzene, hexachloro-

Coal tar creosote
 Creosote

Cobalt
 Cobalt

Cobalt-59
Cobalt

Codechicine
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Colloidal manganese
Manganese

Compound 1189
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-

Compound 497
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-(8 CI); 2,7;3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Copper
Copper

Copper # 1
Copper

Copper powder
Copper

Cotofilm
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Cremomethazine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Creosote from coal tar
Creosote

Creosote oil
Creosote

Cu #3
Copper

CuEP
Copper

CuEPP
Copper

Cutaval
Manganese

DBH
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

DCMU
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

DCuP1
Copper

DDD
Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

DDE
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

DDT
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Decachloroketone
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-

Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalen-2-one
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-

Decachloropentacyclo(5.2.1.0{2,6}.0{3,9}.0{5},{8})decan-4-one
1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-

Dechlorane
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane Plus
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

Dechlorane Plus 515
 $1,3,4\text{-Metheno-}1\text{H-cyclobuta(cd)pentalene, }1,1\alpha,2,2,3,3\alpha,4,5,5,5\alpha,5\beta,6\text{-dodecachlorooctahydro-}$

Dechlorane 4070
 $1,3,4\text{-Metheno-}1\text{H-cyclobuta(cd)pentalene, }1,1\alpha,2,2,3,3\alpha,4,5,5,5\alpha,5\beta,6\text{-dodecachlorooctahydro-}$

Dechlorane 515
 $1,3,4\text{-Metheno-}1\text{H-cyclobuta(cd)pentalene, }1,1\alpha,2,2,3,3\alpha,4,5,5,5\alpha,5\beta,6\text{-dodecachlorooctahydro-}$

Deoval
 $\text{Ethane, }1,1,1\text{-trichloro-}2,2\text{-bis(p-chlorophenyl)- (8 CI); Benzene, }1,1'\text{-}(2,2,2\text{-trichloroethylidene)bis(4-chloro- (9 CI)}$

Detmol-Extrakt
 $\text{Cyclohexane, }1,2,3,4,5,6\text{-hexachloro-, gamma- (8 CI); Cyclohexane, }1,2,3,4,5,6\text{-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)}$

Detox
 $\text{Ethane, }1,1,1\text{-trichloro-}2,2\text{-bis(p-chlorophenyl)- (8 CI); Benzene, }1,1'\text{-}(2,2,2\text{-trichloroethylidene)bis(4-chloro- (9 CI)}$

Detoxan
 $\text{Ethane, }1,1,1\text{-trichloro-}2,2\text{-bis(p-chlorophenyl)- (8 CI); Benzene, }1,1'\text{-}(2,2,2\text{-trichloroethylidene)bis(4-chloro- (9 CI)}$

Devoran
 $\text{Cyclohexane, }1,2,3,4,5,6\text{-hexachloro-, gamma- (8 CI); Cyclohexane, }1,2,3,4,5,6\text{-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)}$

Diazil
 $\text{Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)}$

Diazil [the sulfanilamide]
 $\text{Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)}$

Diazyl
 $\text{Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)}$

Dibovin
 $\text{Ethane, }1,1,1\text{-trichloro-}2,2\text{-bis(p-chlorophenyl)- (8 CI); Benzene, }1,1'\text{-}(2,2,2\text{-trichloroethylidene)bis(4-chloro- (9 CI)}$

Dichlorodiphenyl dichloroethane
 $\text{Ethane, }1,1\text{-dichloro-}2,2\text{-bis(p-chlorophenyl)- (8 CI); Benzene, }1,1'\text{-}(2,2\text{-dichloroethylidene)bis(4-chloro- (9 CI)}$

Dichlorodiphenyltrichloroethane
 $\text{Ethane, }1,1,1\text{-trichloro-}2,2\text{-bis(p-chlorophenyl)- (8 CI); Benzene, }1,1'\text{-}(2,2,2\text{-trichloroethylidene)bis(4-chloro- (9 CI)}$

Dicophane
 $\text{Ethane, }1,1,1\text{-trichloro-}2,2\text{-bis(p-chlorophenyl)- (8 CI); Benzene, }1,1'\text{-}(2,2,2\text{-trichloroethylidene)bis(4-chloro- (9 CI)}$

Diieldrex
 $1,4:5,8\text{-Dimethanonaphthalene, }1,2,3,4,10,10\text{-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6\text{-Dimethanonaphth(2,3-b)oxirene, }3,4,5,6,9,9\text{-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2alpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)}$

Diieldrin
 $1,4:5,8\text{-Dimethanonaphthalene, }1,2,3,4,10,10\text{-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6\text{-Dimethanonaphth(2,3-b)oxirene, }3,4,5,6,9,9\text{-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2alpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)}$

Dielmoth
 $1,4:5,8\text{-Dimethanonaphthalene, }1,2,3,4,10,10\text{-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6\text{-Dimethanonaphth(2,3-b)oxirene, }3,4,5,6,9,9\text{-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2alpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)}$

Dilene
 $\text{Ethane, }1,1\text{-dichloro-}2,2\text{-bis(p-chlorophenyl)- (8 CI); Benzene, }1,1'\text{-}(2,2\text{-dichloroethylidene)bis(4-chloro- (9 CI)}$

Dimezathine
 $\text{Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)}$

Dioxin [herbicide contaminant]
 $\text{Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)}$

Distodin
 $\text{Phenol, 2,2'-methylenebis(3,4,6-trichloro-}$

Diuron
 $\text{Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)}$

DMU (VAN)
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Dodat
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Dodecachlorooctahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalene
 1,3,4-Metheno-1H-cycloocta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

Dol Granule
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Dorytox
 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
 (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
 (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

Dowicide 7
 Phenol, pentachloro-

Drilltox-Spezial Aglukon
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Duran
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Dykol
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

E 3314
 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

E-Cu57
 Copper

ENT 15,152
 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

ENT 25,584
 4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

ENT 25,719
 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

ENT 25540
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
 O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

ENT 7,796
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

ENT-1506
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

ENT-16225
 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
 (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
 (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI)

ENT-16391
 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-

Entex
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
 O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Entomoran
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

E05A
 Iron

EP 30
 Phenol, pentachloro-

Epoxyheptachlor
 4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Cranol
 Iodine

 Estonate
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

 Estonox
 Toxaphene

 Ethane, 1,1,1-trichloro-2,2-bis(4-chlorophenyl)
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

 Xofene
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-)

 Enthion
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
 O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

 Ferrovac E
 Iron

 Fesia-sin
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-)

 Fluorine
 Fluorine

 Fluorine-19
 Fluorine

 Forst U 46
 Acetic acid, (2,4,5-trichlorophenoxy)-

 Forst-Nexen
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Portex
 Acetic acid, (2,4,5-trichlorophenoxy)-

 Fostril
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-)

 Fungifen
 Phenol, pentachloro-
 S 11
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-)

 Gamma benzene hexachloride
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Gamma-Benzene hexachloride
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Gamma-BHC
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Gamma-HCH
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Gamma-Hexachloran
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Gamma-Hexachlorane
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Gamma-Hexachlorobenzene
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Gamma-Hexachlorocyclohexane
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

 Gamma-Lindane
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

gamma-1,2,3,4,5,6-Hexachlorocyclohexane
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gammater
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Gamophen
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Gamophene
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

GC 1189
 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro-

GC 1283
 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

Geniphen
 Toxaphene

Germa-Medica
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Gesafid
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Gesarol
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Gexane
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

SPKh
 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Grey arsenic
 Arsenic

Grundier Arbezol
 Phenol, pentachloro-

HCB
 Benzene, hexachloro-

HCC
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HCCH
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HCE
 4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

HCH
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Heclotox
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HEOD
 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
 (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
 (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta,7alpha)- (9 CI)

Hepta
 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Heptachlor
 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Heptachlor epoxide
 4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI);
 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

Heptachlorane
 $4,7\text{-Methanoindene, } 1,4,5,6,7,8,8\text{-heptachloro-}3\alpha,4,7,7\alpha\text{-tetrahydro-}$ (8 CI); $4,7\text{-Methano-1H-indene, } 1,4,5,6,7,8,8\text{-heptachloro-}3\alpha,4,7,7\alpha\text{-tetrahydro-}$ (9 CI)

Herbatox (VAN)
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Hercules 3956
Toxaphene

Hexa
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexablam
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexachloran
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexachlorane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexachlorobenzene
Benzene, hexachloro-

Hexachlorocyclopentadiene dimer
1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Hexachlorofen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexachlorophen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexachlorophene
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexafen
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexaverm
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexicide
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hexophene
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexosan
Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Hexyclan
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HGI
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hortex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Hungaria L 7
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

HW 920
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Iolloxol
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2alpha,3beta,6alpha,7beta,7alpha)- (9 CI)

Insectlack
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2alpha,3beta,6alpha,7beta,7alpha)- (9 CI)

Iodine
Iodine

Iodine ((127) I2)
 Iodine

Iodine colloidal
 Iodine

Iodine crystals
 Iodine

Iodine sublimed
 Iodine

Iodine-127
 Iodine

Ionium
 Thorium, isotope of mass 230

Iosan Superdip
 Iodine

Iron
 Iron

Ivoran
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Jacutin
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Julin's carbon chloride
 Benzene, hexachloro-

Kafar copper
 Copper

Kamfochlor
 Toxaphene

Karamex
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Karmex
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Karmex Diuron Herbicide
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Karmex DW
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Kelametazine
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Kepone
 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Kokotine
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Kombi-Albertan
 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
 (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
 (1alpha,2beta,2alpha,3beta,6alpha,7alpha)- (9 CI)

KS-4
 Lead

Kwell
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

L 3
 Silver

Laurtol
 Phenol, pentachloro-

Lead
 Lead

Lead Flake
 Lead

Lead of mass 210
 Lead, isotope of mass 210

Lead S2
Lead

Lead-210
Lead, isotope of mass 210

Lebaycid
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Lendine
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lentox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lidenal
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindatox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Linindex
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lindosep
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lintox
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Linur
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Liroprem
Phenol, pentachloro-

Loha
Iron

Lorexane
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Lysodren
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

M 1
Copper

M 3
Copper

M 4
Copper

M 5055
Toxaphene

Manganese
Manganese

Marmer
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

MChVL
Molybdenum

Mefanal
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Melipax
Toxaphene

Mercaptophos (VAN)

Phosphorothioic acid, 0,0-dimethyl 0-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, 0,0-dimethyl 0-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Mercury

Mercury

Merek

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

Mermeth

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Metallic arsenic

Arsenic

Methyl mercury ion

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury ion(1+)

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury(II) cation

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylmercury(1+)

Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)

Methylpyrene

Pyrene, methyl-

Me1700

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Millol 49

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Mirex

1,3,4-Metheno-1H-cyclobuta(cd)pentalen, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

Mitotan

Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Mitotane

Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Molecular iodine

Iodine

Molybdenum

Molybdenum

Moth Snub D

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta,7alpha)- (9 CI)

MPP (VAN)

Phosphorothioic acid, 0,0-dimethyl 0-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, 0,0-dimethyl 0-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

MPP [pesticide]

Phosphorothioic acid, 0,0-dimethyl 0-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, 0,0-dimethyl 0-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Mszycol

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Mutoxan

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

M1 [copper]

Copper

M2 [copper]

Copper

M3 [copper]

Copper

M3S

Copper

M3I

Copper

M4 [copper]

Copper

S (1)-(4,6-Dimethyl-2-pyrimidinyl)sulfanilamide

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

N (1)-(4,6-Dimethyl-2-pyrimidinyl) sulfanilamide

Sulfanilamide, N(1)-(4,6-diethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-diethyl-2-pyrimidinyl)- (9 CI)

N-(3,4-Dichlorophenyl)-N',N'-dimethylurea

Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

N-(4,6-Dimethyl-2-pyrimidinyl) sulfanilamide

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

N-Hydroxyoctanamide

Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

N'-(3,4-Dichlorophenyl)-N,N-dimethylurea

Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Nabac

Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Neasina

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Neazina

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Neo-Scabicidol

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Neocid

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Neocidol

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Neosept V

Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Nexen FB

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexit

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexit-starck

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Nexol-E

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Ni 0901-S(Harshaw)

Nickel

Ni 270

Nickel

Ni 4303T

Nickel

Nickel

Nickel

Nickel NP2

Nickel

Nickel 270

Nickel

Nicochloran
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

No Bunt
 Benzene, hexachloro-

No Bunt Liquid
 Benzene, hexachloro-

No Bunt 40
 Benzene, hexachloro-

No Bunt 80
 Benzene, hexachloro-

Nonachlor, cis
 $4,7\text{-Methanoindan, } 1\alpha,2\alpha,3\alpha,4\beta,5,6,7\beta,8,8\text{-nonachloro-}3\alpha\alpha,4,7,7\text{-aalpha-tetrahydro-}$ (8 CI); $4,7\text{-Methano-1H-indene, } 1,2,3,4,5,6,7,8,8\text{-nonachloro-}2,3,3\alpha,4,7,7\alpha\text{-hexahydro-}$ (1alpha,2alpha,3alpha,4beta,7alpha- (9 CI)

NP2
 Nickel

NSC-38721
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

o,p'-DDD
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

o,p'-Dichlorodiphenyldichloroethane
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

o,p'-TDE
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Octachlor epoxide
 $4,7\text{-Methanoindan, } 1,2,4,5,6,7,8,8\text{-octachloro-}1,2\text{-epoxy-}3\alpha,4,7,7\alpha\text{-tetrahydro-}$ (8 CI); $2,5\text{-Methano-2H-indeno(1,2-b)oxirene, } 1\alpha,2,3,4,5,6\alpha,7,7\text{-octachloro-}1\alpha,1\beta,5,5\alpha,6,6\alpha\text{-hexahydro-}$ (9 CI)

Octalox
 $1,4:5,8\text{-Dimethanonaphthalene, } 1,2,3,4,10,10\text{-hexachloro-}6,7\text{-epoxy-}1,4,4\alpha,5,6,7,8,8\text{-octahydro-, endo,exo-}$ (8 CI); $2,7:3,6\text{-Dimethanonaphth(2,3-b)oxirene, } 3,4,5,6,9,9\text{-hexachloro-}1\alpha,2,2\alpha,3,6,6\alpha,7,7\alpha\text{-octahydro-}$, (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta,7alpha)- (9 CI)

Octanolhydroxamic acid
 Octanolhydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

OFHC Cu
 Copper

Omitox
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

OMS 2
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Ovadziak
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Ovadziak
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Oxychlordan
 $4,7\text{-Methanoindan, } 1,2,4,5,6,7,8,8\text{-octachloro-}1,2\text{-epoxy-}3\alpha,4,7,7\alpha\text{-tetrahydro-}$ (8 CI); $2,5\text{-Methano-2H-indeno(1,2-b)oxirene, } 1\alpha,2,3,4,5,6\alpha,7,7\text{-octachloro-}1\alpha,1\beta,5,5\alpha,6,6\alpha\text{-hexahydro-}$ (9 CI)

Oxychlordane
 $4,7\text{-Methanoindan, } 1,2,4,5,6,7,8,8\text{-octachloro-}1,2\text{-epoxy-}3\alpha,4,7,7\alpha\text{-tetrahydro-}$ (8 CI); $2,5\text{-Methano-2H-indeno(1,2-b)oxirene, } 1\alpha,2,3,4,5,6\alpha,7,7\text{-octachloro-}1\alpha,1\beta,5,5\alpha,6,6\alpha\text{-hexahydro-}$ (9 CI)

p,p'-DDD
 Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-DDE
 Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

p,p'-DDT
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyl-2,2-dichloroethylene
 Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyldichloroethane
 Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyldichloroethylene
 Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

p,p'-Dichlorodiphenyltrichloroethane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

p,p'-TDE
 Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Parachlorocidum
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Paramez
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

PCB
 Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)

PCB 1254
 Arochlor 1254

PCB 1260
 Aroclor 1260

PChK
 Toxaphene

PCP
 Phenol, pentachloro-

PEB1
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Pedraczak
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Penchlorol
 Phenol, pentachloro-

Penphene
 Toxaphene

Penta
 Phenol, pentachloro-

Pentachlorin
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Pentachlorophenol
 Phenol, pentachloro-

Pentachlorophenyl chloride
 Benzene, hexachloro-

Penticidum
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Perchlorobenzene
 Benzene, hexachloro-

Perchlorodihomocubane
 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

Perchloropentacyclo(5.2.1.0(2,6).0(3,9).0(5,8))decane
 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

Perchloropentacyclodecane
 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

Permasan
 Phenol, pentachloro-

Pflanzol
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Phenacide
 Toxaphene

Phenatox
 Toxaphene

Phenthion
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
 O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

pHisoHex
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Pirmazin
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Polonium-210
 Polonium, isotope of mass 210

Polychlorocamphene
 Toxaphene

PZh-1M3
 Iron

PZh-2
 Iron

PZh1M1
 Iron

PZh2M
 Iron

PZh2M1
 Iron

PZh2M2
 Iron

PZh3
 Iron

PZh3M
 Iron

PZh4M
 Iron

Quelotox
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
 O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Quellada
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Quicksilver
 Mercury

Radium D
 Lead, isotope of mass 210

Radium F
 Polonium, isotope of mass 210

Radium-226
 Radium, isotope of mass 226

Raney alloy
 Nickel

Raney copper
 Copper

Raney nickel
 Nickel

RCH 55/5
 Nickel

Red Shield
 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-5,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
 (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
 (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta,7alpha)- (9 CI)

Rhodiachlor
 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene,
 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)

Rhothane
 Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-
 (9 CI)

Ritosept
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

S 1752
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid,
 O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

S-Mez
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sang-gamma
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Sanocide
 Benzene, hexachloro-

Santophen 20
 Phenol, pentachloro-

SD 3417
 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-
 (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
 (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta,7alpha)- (9 CI)

Selenium
 Selenium

Septisol
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Septofen
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Shell Silver
 Silver

Silflake 135
 Silver

Silver
 Silver

Silver atom
 Silver

Silver metal
 Silver

Snieciotox
 Benzene, hexachloro-

Spanbolet
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Spritz-Rapidin
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Spruehpflanzol
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Sr 999
 Silver

Steral
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Steraskin
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Streunex
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Strobane T
 Toxaphene

Sulfadimerazine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimesin

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimesine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimethyldiazine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimethylpyrimidine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimezin

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimezine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimidin

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadimidine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfadine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamethazine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamethiazine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfamezathine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfidophos

Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Sulfix

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfodimesin

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulfodimesine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulmet

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphadimethylpyrimidine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphadimidine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamethasine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamethazine

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamezathine
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphamidine
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Sulphodimesine
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Supperseptil
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Supperseptyl
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Surgi-Cen
 Phenol, 2,2'-methylenebis{3,4,6-trichloro-

Surofene
 Phenol, 2,2'-methylenebis{3,4,6-trichloro-

SUY B-2
 Iron

Synthetic 3956
 Toraphene

S0
 Lead

S1
 Lead

Tafidex
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Taloder
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-a-tolyl ester (8 CI); Phosphorothioic acid,
 O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Tap 85
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

Taselin
 Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI)

TCDBD
 Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

TCDD
 Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)

TDE
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Telvar Diuron Weed Killer
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

Teraseptic
 Phenol, 2,2'-methylenebis{3,4,6-trichloro-

Termitox
 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,5a,5,6,7,8,8a-octahydro-, endo,exo-
 (8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,
 (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta,7alpha)- (9 CI)

Tetrachlorodiphenyl ethane
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

Tetraphene
 Benz(a)anthracene

Thorium-230
 Thorium, isotope of mass 230

Thorium, isotope mass-230
 Thorium, isotope of mass 230

Tiguwon
 Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-*n*-tolyl ester (8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester (9 CI)

Total DDT
 Total DDT (No postings in CHEMLINE).

Toxakil
 Toxaphene

Toxaphen
 Toxaphene

Toxyphen
 Toxaphene

trans-Nonachlor
 4,7-Methano-1*H*-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3*a*,4,7,7*a*-hexahydro-, (1*alpha*,2*beta*,3*alpha*,3*alpha*,4*beta*,7*beta*,7*alpha*)-

Tri-6
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1*alpha*,2*alpha*,3*beta*,4*alpha*,5*alpha*,6*beta*)- (9 CI)

Trichlorobis(4-chlorophenyl)ethane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Trichlorophene
 Phenol, 2,2'-methylenebis(3,4,6-trichloro-

Trioxon
 Acetic acid, (2,4,5-trichlorophenoxy)-

Tsm1
 Molybdenum

Uranium I [(238) U]
 Uranium

Uranium-238
 Uranium

V 9
 Silver

Velsicol 104
 4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3*a*,4,7,7*a*-tetrahydro- (8 CI); 4,7-Methano-1*H*-indene, 1,4,5,6,7,8,8-heptachloro-3*a*,4,7,7*a*-tetrahydro- (9 CI)

Velsicol 53-CS-17
 4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3*a*,4,7,7*a*-tetrahydro- (8 CI); 2,5-Methano-2*H*-inden(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1*a*,1*b*,5,5*a*,6,6*a*-hexahydro- (9 CI)

Vertolan
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Vertolin
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

Verton 2-T
 Acetic acid, (2,4,5-trichlorophenoxy)-

Verton 2T
 Acetic acid, (2,4,5-trichlorophenoxy)-

Viton
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1*alpha*,2*alpha*,3*beta*,4*alpha*,5*alpha*,6*beta*)- (9 CI)

Zerdane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

Zinc
 Zinc

1-(3,4-Dichlorophenyl)-3,3-dimethylurea
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

1,1-Bis(p-chlorophenyl)-2,2-dichloroethane
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,1-Bis(4-chlorophenyl)-2,2-dichloroethane
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(4-chlorophenyl)ethylene
 Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

1,1-Dichloro-2,2-di(p-chlorophenyl)ethylene
 Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)

1,1-Dimethyl-3-(3,4-dichlorophenyl)urea
 Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)

1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,1,1-Trichloro-2,2-bis(4,4'-dichlorodiphenyl)ethane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

1,2-Benz(a)anthracene
 Benz(a)anthracene

1,2-Benzanthracene
 Benz(a)anthracene

1,2-Benzanthrene
 Benz(a)anthracene

1,2-Benzoanthracene
 Benz(a)anthracene

1,2,3,4,5,6-Hexachlorocyclohexane
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-,
 (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-, dimer
 1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-

1721 Gold
 Copper

2-(p-Aminobenzenesulfonamido)-4,6-dimethylpyrimidine
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

2-(2-Chlorophenyl)-2-(4-chlorophenyl)-1,1-dichloroethane
 Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene,
 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)

2-Sulfanilamido-4,6-dimethylpyrimidine
 Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide,
 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)

2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane
 Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)

2,2-Bis(4-chlorophenyl)-1,1-dichloroethane
 Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)

- 2,2-Bis(4-chlorophenyl)-1,1-dichloroethylene
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
- 2,2'-Dihydroxy-3,3',5,5',6,6'-hexachlorodiphenylmethane
Phenol, 2,2'-methylenebis(3,4,6-trichloro-
- 2,2'-Dihydroxy-3,5,6,3',5',6'-tetrachlorodiphenylmethane
Phenol, 2,2'-methylenebis(3,4,6-trichloro-
- 2,2'-Methylenebis(3,4,6-trichlorophenol)
Phenol, 2,2'-methylenebis(3,4,6-trichloro-
- 2,2',3,3',5,5'-Hexachloro-6,6'-dihydroxydiphenylmethane
Phenol, 2,2'-methylenebis(3,4,6-trichloro-
- 2,3-Benzophenanthrene
Benz(a)anthracene
- 2,3,7,8-Tetrachlorodibenzo-p-dioxin
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)
- 2,3,7,8-Tetrachlorodibenzo-1,4-dioxin
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)
- 2,4,5-T
Acetic acid, (2,4,5-trichlorophenoxy)-
- 3-(3,4-Dichlorophenyl)-1,1-dimethylurea
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N¹-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)
- 3-Chlorochlordene
4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)
- 3,4-Benz(a)pyrene
Benzo(a)pyrene
- 3,4-Benzopyrene
Benzo(a)pyrene
- 3,4-Benzopyrene [carcinogen]
Benzo(a)pyrene
- 4,4'-DDD
Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
- 4,4'-DDE
Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro- (9 CI)
- 4,4'-Dichlorodiphenyltrichloroethane
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
- 4,6-Dimethyl-2-sulfanilamidopyrimidine
Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)
- 666
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

ANIMALS

Antelope, pronghorn	Duck, mallard	Salmon, coho
Bass, black sea	Earthworm	Scallop, sea
Bass, largemouth	Eider, common	Scup
Bat, big brown	Fish	Seal
Bat, little brown	Flounder, summer	Shad, American
Beaver	Gannet, Norwegian	Sharwater, sooty
Bluefish	Grebe, western	Sheep
Bluegill	Grouse, ruffed	Shrew
Booby, Peruvian	Gull, great black-backed	Shrimp, freshwater
Bullhead, black	Gull, herring	Snake
Bullhead, brown	Hake, red	Snake, garter
Burbot	Hare	Snake, water
Butterfish	Lobster	Spot
Carp	Magpie	Squirrel, gray
Catfish, channel	Mink	Swan, mute
Cattle	Monkey	Swine
Chicken	Mouse	Tern, Inca
Chubsucker, Greek	Mouse, deer	Toad
Clam, surf	Mouse, field	Trout
Coot, American	Mouse, white-footed	Trout, brook
Cormorant, Guanay	Mullet	Trout, lake
Cormorant, red-legged	Otter	Trout, rainbow
Crab	Oyster	Tuna
Crappie	Perch, yellow	Tuna, albacore
Crappie, black	Pike, northern	Tuna, skipjack
Crayfish	Porpoise, harbor	Tuna, yellowfin
Croaker	Pumpkin seed	Turtle, box
Crocodile, American	Quahog	Turtle, slider
Crow	Rabbit, cottontail	Vole, meadow
Deer, mule	Rabbit, swamp	Vulture, king
Deer, whitetail	Raccoon	

TISSUES AND BODY FLUIDS

Abdomen	Gonads
Adipose	Green gland
Adrenal gland	Gut
Bile	Hair
Blood	Heart
Blood, cells	Hepatopancreas
Blood, plasma	Intestine
Blood, serum	Kidney
Blood, whole	Liver
Body	Lung
Body, whole	Muscle
Bone	Nerve
Brain	Pancreas
Cecum	Pituitary
Claws	Salivary gland
Digestive gland	Skin
Eggs	Spleen
Feathers	Stomach
Fetal	Thorax
Gills	Thyroid gland
Gizzard	Urine

ANIMALS

Antelope, pronghorn	Duck, mallard	Salmon, coho
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Deer, mule	Rabbit, swamp	Vulture, king
Deer, whitetail	Raccoon	

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Abdomen	Gonads
Adipose	Green gland
Adrenal gland	Gut
Bile	Hair
Blood	Heart
Blood, cells	Hepatopancreas
Blood, plasma	Intestine
Blood, serum	Kidney
Blood, whole	Liver
Body	Lung
Body, whole	Muscle
Bone	Nerve
Brain	Pancreas
Cecum	Pituitary
Claws	Salivary gland
Digestive gland	Skin
Eggs	Spleen
Feathers	Stomach
Fetal	Thorax
Gills	Thyroid gland
Gizzard	Urine

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- WISCONSIN 275, 276

DIRECTORY - CAS PREFERRED NAMES

Acetic acid, (2,4,5-trichlorophenoxy)-	1	
Arochlor 1254	5	
Aroclor 1016	12	
Aroclor 1260	16	
Arsenic	21	
Benz(a)anthracene	27	
Benzene, hexachloro-	33	
Benzo(a)pyrene	40	
Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)	46	
Boron	63	
Cadmium	65	
Cesium, isotope of mass 137	119	
Chromium	120	
Cobalt	122	
Copper	124	
Creosote	168	
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha-	(8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha, 3beta,4alpha,5beta,6beta)-	(9 CI) 169
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma-	(8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha, 3beta,4alpha,5alpha,6beta)-	(9 CI) 175
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro-	(8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro-	(9 CI) 177
Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)-	(8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)-	(9 CI) 183
Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)-	(8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	(9 CI) 186
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-	(8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	(9 CI) 196
Ethyleno, 1,1-dichloro-2,2-bis(p-chlorophenyl)-	(8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro-	(9 CI) 202
Fluorine	217	
Iodine	219	
Iron	223	
Lead	226	
Lead, isotope of mass 210	277	
Manganese	279	
Mercury	285	
Mercury(+), methyl-, ion	(8 CI); Mercury(+), methyl-	(9 CI) 339
Molybdenum	357	
Nickel	371	
Octanohydroxamic acid	(8 CI); Octanamide, N-hydroxy-	(9 CI) 382
Phenol, pentachloro-	397	
Phenol, 2,2'-methylenebis(3,4,6-trichloro-	401	
Phosphorothioic acid, O,O-dimethyl O-(4-methylthio)-m-tolyl ester	(8 CI); Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-(methylthio)phenyl) ester	(9 CI) 405
Polonium, isotope of mass 210	406	
Pyrene	408	
Pyrene, methyl-	414	
Radium, isotope of mass 226	420	

DIRECTORY - CAS PREFERRED NAMES

Selenium 423

Silver 432

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI) 436

Thorium, isotope of mass 230 441

Total DDT (No postings in CHEMLINE). 444

Toxaphene 449

Uranium 453

Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI) 457

Zinc 459

1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- 490

1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- 509

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI); 2,7;3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- (9 CI) 515

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3aalpha,4beta,7beta,7aalpha)- 521

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 525

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI) 528

4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3aalpha,4,4,7,7a-alpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI) 529

4,7-Methanoindan, 1alpha,2alpha,4beta,5,6,7beta,8,8-octachloro-3aalpha,4,4,7,7a-alpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,3aalpha,4beta,7beta,7aalpha)- (9 CI) 530

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,4,7,7a-tetrahydro- (9 CI) 532

DIRECTORY - FORMULAS

Ag	Silver	432
As	Arsenic	21
B	Boron	63
C-H3-Hg	Mercury(1+), methyl-, ion (8 CI); Mercury(1+), methyl- (9 CI)	339
Ca	Cadmium	65
Co	Cobalt	122
Cr	Chromium	120
Cs	Cesium, isotope of mass 137	119
Cu	Copper	124
C10-C11O-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	509
C10-C112	1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-	490
C10-H15-03-P-S2	Phosphorothioic acid, 0,0-dimethyl 0-(4-methylthio)-m-tolyl ester (8 CI); Phosphorothioic acid, 0,0-dimethyl 0-(3-methyl-4-(methylthio)phenyl) ester (9 CI)	405
C10-H4-C18-0	4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)	525
C10-H5-C17	4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- (9 CI)	532
C10-H5-C17-0	4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro- (8 CI); 2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)	528
C10-H5-C19	4,7-Methanoindene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,4alpha,4beta,7beta,7alpha)-	521
	4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3alpha,4,7,7a-alpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-(1alpha,2alpha,3alpha,4alpha,4beta,7alpha)- (9 CI)	529
C10-H6-C18	4,7-Methanoindan, 1alpha,2alpha,3alpha,4beta,5,6,7beta,8,8-nonachloro-3alpha,4,7,7a-alpha-tetrahydro- (8 CI); 4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2alpha,3alpha,4beta,7beta,7alpha)- (9 CI)	530
C12-H14-N4-02-S	Sulfenilamide, N(1)-(4,6-dimethyl-2-pyrimidinyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(4,6-dimethyl-2-pyrimidinyl)- (9 CI)	436
C12-H4-C14-02	Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI); Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro- (9 CI)	177
C12-H8-C16-0	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo-(8 CI); 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2alpha,3alpha,3beta,6beta,6alpha,7beta,7alpha)- (9 CI)	515
C13-H6-C16-02	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	401
C14-H10-C14	Ethane, 1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)- (8 CI); Benzene, 1-chloro-2-(2,2-dichloro-1-(4-chlorophenyl)ethyl)- (9 CI)	183
	Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	186
C14-H8-C14	Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro-	202

DIRECTORY - FORMULAS

C14-H9-C15	
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI); Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)	196
Total DDT (No postings in CHEMLINE). 444	
C16-H10	
Pyrene 408	
C17-H12	
Pyrene, methyl- 414	
C18-H12	
Benz(a)anthracene 27	
C20-H12	
Benzo(a)pyrene 40	
C6-C16	
Benzene, hexachloro- 33	
C6-H-C15-O	
Phenol, pentachloro- 397	
C6-H6-C16	
Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI) 169	
Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI) 175	
C8-H17-N-02	
Octanohydroxamic acid (8 CI); Octanamide, N-hydroxy- (9 CI) 382	
C8-H5-C13-O3	
Acetic acid, (2,4,5-trichlorophenoxy)- 1	
C9-H10-C12-N2-O	
Urea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI); Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI) 457	
EXACT COMPOSITION UNKNOWN OR UNDETERMINED	
Arochlor 1254 5	
Aroclor 1016 12	
Aroclor 1260 16	
Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI) 46	
Creosote 168	
Toxaphene 449	
F	
Fluorine 217	
Fe	
Iron 223	
Hg	
Mercury 285	
I	
Iodine 219	
Mn	
Manganese 279	
Mo	
Molybdenum 357	
Ni	
Nickel 371	
Pb	
Lead 226	
Lead, isotope of mass 210 277	
Po	
Polonium, isotope of mass 210 406	
Ra	
Radium, isotope of mass 226 420	
Se	
Selenium 423	

DIRECTORY - FORMULAS

Th Thorium, isotope of mass 230 441

U Uranium 453

Zn Zinc 459

Acetic acid, (2,4,5-trichlorophenoxy) -
 93-16-5
 C8-15-C13-03
 RR 255-49, MF 153 C (crystals from benzene)
 Caco, American
 FULICA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
1 Adipose	GC	12	5.0-30.0 ppb	21.0 ppb		Collected 8/76 - 12/76 in reservoir receiving runoff from watershed on which 1093 ha were treated with 0.56 kg/ha, 6/76. Texas, White River Lake	Garcia, J.D., Rhodes, M.J., 1979 Bulletin of Environmental Contamination and Toxicology 23:231-235
2 Gizzard	GC	5	6.0-41.0 ppb	18.0 ppb		Collected 8/76 - 12/76 in reservoir receiving runoff from watershed on which 1093 ha were treated with 0.56 kg/ha, 6/76 Significantly higher residues in 1/76 Texas, White River Lake	Garcia, J.D., Rhodes, M.J., 1979 Bulletin of Environmental Contamination and Toxicology 23:231-235
3 Liver	GC	5	2.0-118.0 ppb	39.0 ppb		Collected 8/76 - 12/76 in reservoir receiving runoff from watershed on which 1093 ha were treated with 0.56 kg/ha, 6/76 Significantly higher residues in 8/76 ($F = <.05$) Texas, White River Lake	Garcia, J.D., Rhodes, M.J., 1979 Bulletin of Environmental Contamination and Toxicology 23:231-235
4 Muscle	GC	14	8.0-133.8 ppb	199.0 ppb		Collected 8/76 - 12/76 in reservoir receiving runoff from watershed on which 1093 ha were treated with 0.56 kg/ha, 6/76 Significantly higher residues in 10/76 and 11/76 ($P = <.05$) Texas, White River Lake	Garcia, J.D., Rhodes, M.J., 1979 Bulletin of Environmental Contamination and Toxicology 23:231-235

Arochlor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Duck, Mallard
Anas platyrhynchos

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
5 Body	Ingestion GC		a) 5 b) 10 c) 5 d) 10 e) 2 f) 3 g) 10	a) Not given b) Not given c) Not given d) Not given e) Not applicable f) Not given g) Not given	a) 0.13 + or - 0.01 ppm b) 64.2 + or - 4.0 ppm c) 0.09 + or - 0.01 ppm d) 55.3 + or - 1.9 ppm e) Not detected ppm f) 0.06 + or - 0.01 ppm g) 29.5 + or - 1.4 ppm Net wt	a) Controls, drakes drakes, 25 ppm diet Controls, hens Hens, 25 ppm diet Ducklings hatched by control hens Ducklings hatched by control hens Ducklings hatched by hens, 25 ppm 9 no old game-farm birds on 25 ppm or standard diet for at least 1 mo before egg laying. 3 wk old ducklings hatched from 3rd egg of each clutch, on 25 ppm or standard diet Feathers, bills, feet, wing tips and gastrointestinal tracts removed. No detrimental effects on reproductivity or nest attentiveness. BIRDS; DUCKS; EGGS; JUVENILES; POLYCHLORINATED BIPHENYLIS; POAOCUMULATION; PESTICIDE RESIDUES; FCDI; MARYLAND; ADULTS;	Custer, T.W. Heinz, G.B. 1980 Environmental Pollution (Series A) 21:313-318
6 Eggs	Ingestion GC		a) 4 b) 1 c) 4	a) Not given b) Not applicable c) Not given	a) 0.19 ppm b) Not detected c) 23.3 + or - 1.0 ppm Net wt	a) Hatched by control hens b) Hatched by control hens c) Hatched by hens on 25 ppm diet 3rd eggs from clutches hatched by 9 no old game-farm birds fed a 25 ppm or standard diet for at least 1 mo before egg laying. No detrimental effects on reproductivity or nest attentiveness. BIRDS; DUCKS; EGGS; JUVENILES; POLYCHLORINATED BIPHENYLIS; POAOCUMULATION; PESTICIDE RESIDUES; FODI; MARYLAND; ADULTS	Custer, T.W. Heinz, G.B. 1980 Environmental Pollution (Series A) 21:313-318
7 Adipose							

Arochlor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Grebe, Western
Archichthorus occidentalis

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
7 Adipose		GC	18	<1-84.0 ppm wet wt	16.7 ppm wet wt	Visceral fat higher levels in birds with sparse or no visceral fat collected 1973-74.	Lindwall, M. Low, J.B. 1975 Bulletin of Environmental Contamination and Toxicology 22:74-76

(NEXT PAGE)

hexachlor 1254
11097-66-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Grebe, Western
AFCROPHORUS OCCIDENTALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN	SD	
8 Blood	GC		16	<1 ppm wet wt Not detected-1.1 ppm wet wt	Lindwall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22: 754-760		
9 Eggs	GC		40	<1-3.8 ppm wet wt	Average shell thickness index 1.898 + cr - 0.015 mm. 2.3% decrease from pre-DDT use Period Collected 1973-74.	Lindwall, M.L. Low, J.B. 1980 Pesticides Monitoring Journal 14(3): 103-111	
10 Eggs	GC		40	<1-3.8 ppm wet wt	No detectable effects on reproduction.	Lindwall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22: 754-760	
11 Muscle	GC		24	Not detected-17.6 ppm wet wt	Breast muscle Higher levels in birds with sparse or no visceral fat. Collected 1973-74.	Utah, Bear River Migratory Bird Refuge	Lindwall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22: 754-760

Aroclor 1016
12674-11-2
FACT COMPOSITION UNKNOWN OR UNDETERMINED
Fullhead, brown
ICHALORUS NEPHROUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
12 Body, whole		a) Not given b) Not given	a) 5 b) 5	a) 3.8 ug/g b) 2.8 ug/g	a) Fish mean wt 80 g, mean length 16.8 cm, 3.9% lipid b) Fish mean wt 76 g, mean length 15.1 cm, 1.9% lipid	Fishes transferred from Oxbow Lake, New York to the Hudson River and placed in live cages for 14 days < 0.02 ug/g Arochlor before exposure to Hudson River water. New York, Hudson River	Skea, J.C., Sisonin, H.A., Dean, H.J., Colquhoun, J.R., Spagnoli, J.J., Veith, G.D., 1979, Bulletin of Environmental Contamination and Toxicology 22: 332-336

Aroclor 1016
12674-11-2
FACT COMPOSITION UNKNOWN OR UNDETERMINED
Clubucker, Greek
ERIMTON OBICNEUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
13 Body, whole			2	Not given	2.2 ug/g	Fishes transferred from Oxbow Lake, New York to the Hudson River and placed in live cages for 14 days Whole fish composite samples. Fish mean wt 295 g, mean length 27.4 cm, 7.0% lipid < 0.02 ug/g Arochlor before exposure to Hudson River water. New York, Hudson River	Skea, J.C., Sisonin, H.A., Dean, H.J., Colquhoun, J.R., Spagnoli, J.J., Veith, G.D., 1979, Bulletin of Environmental Contamination and Toxicology 22: 332-336

Aroclor 1016
12674-11-2
FACT COMPOSITION UNKNOWN OR UNDETERMINED
Peach, yellow
PERCA FLAVESENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
14 Body, whole			3	Not given	1.8 ug/g	Fishes transferred from Oxbow Lake, New York to the Hudson River and placed in live cages for 14 days Whole fish composite samples. Fish mean wt 187 g, mean length 24.9 cm, 2.8% lipid < 0.02 ug/g Arochlor before exposure to Hudson River water. New York, Hudson River	Skea, J.C., Sisonin, H.A., Dean, H.J., Colquhoun, J.R., Spagnoli, J.J., Veith, G.D., 1979, Bulletin of Environmental Contamination and Toxicology 22: 332-336

Aroclor 1016
1267-11-2
EFFECT COMPOSITION UNKNOWN OR UNDETERMINED
Pumpkin seed
LIPOSUS GIBBOSUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
15 Body, whole			2	Not given	2.5 ug/g	Fishes transferred from Oxbow Lake, New York to the Hudson River and placed in live cages for 14 days. Whole fish composite samples. Fish mean wt 125 g, mean length 17.8 cm. 2.3% lipid < 0.02 ug/g Aroclor before exposure to Hudson River water. New York, Hudson River	Skea, J.C., Sisonia, H.A., Dean, R.J., Colquhoun, J.R., Spagnoli, J.J., Veith, G.D., 1979 Environmental Contamination and Toxicology 22: 332-336

Aroclor 1260
1109-82-5
EFFECT COMPOSITION UNKNOWN OR UNDETERMINED
Gerb, Western
ACROPHOROUS OCCELLARIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
16 Adipose		GC	18	<1-197.1 ppm wet wt	22.4 ppm wet wt	Visceral fat Higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge	Lindwall, M., Lov, J.B., 1979 Bulletin of Environmental Contamination and Toxicology 22: 754-760
17 Blood		GC	16	Not detected-1.0 ppm wet wt	<1 ppm wet wt	BIRDS: EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTERA; BIOACCUMULATION; PESTICIDE RESIDUES: DDD; DDE; POLYCHLORINATED BIPHENOLS Collected 1973-74.	Lindwall, M., Lov, J.B., 1979 Bulletin of Environmental Contamination and Toxicology 22: 754-760
18 2998		GC	40	<1-5.4 ppm wet wt	<1 ppm wet wt	Average shell thickness index 1.898 + 0.015 mm. 2.3% decrease from pre-DDT use period. Collected 1973-74. Utah, Bear River Migratory Bird Refuge	Lindwall, M., Lov, J.B., 1980 Pesticides Monitoring Journal 14(3): 108-111
						Ic detectable effects on reproduction.	
						EGGS; BIRDS; UTAH: CHLORINE ORGANIC COMPOUNDS; DDE; POLYCHLORINATED BIPHENOLS; BIOACCUMULATION; PESTICIDE RESIDUES	

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Aroclor 1260

11096-82-5
FLUOR COMPOSITION UNKNOWN OR UNDETERMINED
Grebe, Nestling
Aechmophorus occidentalis

(CONTINUED)

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	General Information		Reference
					Mean	Ref.	
19 Eggs	GC		40	<1-5.4 ppm wet wt	<1 ppm wet wt	Lindwall, M. Low, J.B. 1979 Utah, Bear River Migratory Bird Refuge	Bulletin of Environmental and Containment and Toxicology 22:754-760
20 Muscle	GC		24	Not detected-17.6 ppm wet wt	3.8 ppm wet wt	Frest muscle higher levels in birds with sparse or no visceral fat Collected 1973-74. Utah, Bear River Migratory Bird Refuge	Lindwall, M. Low, J.B. 1979 Utah, Bear River Migratory Bird Refuge

Arsenic
As
ATH 74-9216, BP 817 C at 28 atm, BP 613 C (sublimes). VP 1 mm Hg at 360 C, 10 mm Hg at 440 C
Cattle
EOS spp.

98

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	General Information		Reference
					Mean	Ref.	
21 Kidney	AAS		190	Not detected-0.10 ppm wet wt	0.013 + or - 0.021 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales	Planjik, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
22 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) < 0.02 ppm b) 0.04 ppm Ref wt	3) Pastures fertilized with treated raffinate 1) Controls Grazing 6 mos on plots treated with raffinate (100 lb NaCl) or commercial fertilizer (100 lb NaCl). Applied 5/79 and 7/79. Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes	Edwards, R.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
23 Liver		AAS	190	< 0.01-0.09 ppm wet wt	0.013 + or - 0.015 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. CATTLE: ARSENIC; CADMIUM; CHROMIUM; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER	Plajat, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
24 Liver	Ingestion	AAS	a) 4 b) 4	a) < 0.02 ppm b) 0.06 ppm wet wt	a) < 0.02 ppm b) 0.06 ppm wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooler, A.J. 1980 Veterinary and Human Toxicology 22(5):309-311
25 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) < 0.02 ppm b) 0.10 ppm wet wt	No pathological changes CATTLE: RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKARONA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C. Dooler, A.J. 1980 Veterinary and Human Toxicology 22(5):309-311
						a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.	No pathological changes CATTLE: RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKARONA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES

Arsenic
7440-38-2
As
At w 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 360 C, 10 mm Hg at 440 C
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN		REFERENCE
26 Liver	Ingestion		1	Not applicable	0.02 ppm wet wt		From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO ₄ as growth promotant estimated death losses, 400 of 2000 pigs during 10.5 mo. Georgia (N) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, lethargy, weakness, pallor. Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, falciform muscles, watery blood, reddened bone marrow, splenic lymphoid metaplasia. SWINE: GEORGIA; BETAL POISONING; BLOOD; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; BIOACCUMULATION; FOOD ADDITIVES

Fenz(a) anthracene
56-55-3
C18-H12
MP 228.2, MP 160 C, BP 400 C
Pass, blacks sea
CENTROPRITUS STRICTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN		REFERENCE
27 Body, whole		GC GW	1	Not given	< 1 ppb wet wt		Dry wt/wet wt = 0.23 Composite sample of several organisms collected in oil drilling area, depth 57 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Butterfish
PAPRIUS TRIACANTHUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
28 Body, whole	GC UV		Not given	< 20 ppb wet wt		Dry wt/wet wt = 0.29 Composite sample of several organisms Collected in oil drilling area, depth 35 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC BIOCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Flounder, smaser
PARALICHTHYS DENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
29 Body, whole	GC UV		Not given	< 1 ppb wet wt		Dry wt/wet wt = 0.21 Composite sample of several organisms Collected in oil drilling area, depth 102 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC BIOCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; FISHES; WATER POLUTION	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Rake, red
AROPHTATE CRASSUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
30 Body, whole	GC UV		Not given	0.3 ppb wet wt		Composite sample of several organisms Collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC BIOCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Scallop, sea
PLACOPESPIN MAGELLANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEDIUM	GENERAL INFORMATION	REFERENCE
31 Body, whole	GC UV	Not given	1.1 ppb wet wt	1.1 ppb wet wt	Composite sample of several organisms collected in oil drilling area, depth 78 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879	ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; FIOACCUMULATION; WATER POLLUTION; FISHES

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C
Scallop
STERNOTOMUS CHRYOSPS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEDIUM	GENERAL INFORMATION	REFERENCE
32 Body, whole	GC UV	Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.26	Composite sample of several organisms collected in oil drilling area, depth 66 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879	ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; FIOACCUMULATION; WATER POLLUTION; FISHES

benzene, hexachloro-
119-74-1
C6-C16
MW 284.80, MP 231 C, BP 321-326 C, VP 1 mm Hg at 114.4 C
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEDIUM	GENERAL INFORMATION	REFERENCE
33 Eggs	GC	28	0.0-2.5 ppm wet wt	0.03 + or - 0.06 ppm wet wt	Fat/lipid index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.2-9.09 g. Lipid content 6.0-9.6%. Collected 5/77.	Szaro, R.C. Coon, M.C. Kolbe, E. 1973 Bulletin of Environmental Contamination and Toxicology 22: 394-399	BIRDS; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDT; DIELDREN; CYCLOLORDANE; POLYCHLORINATED EPENPHYLIS; FIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA

Benzene, hexachloro-
118-74-1
C-116
HN 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Porpoise, harbor
PHOCOENA PHOCOENA

Benzene, hexachloro-
118-74-1
C-116
HN 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Porpoise, harbor
PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
34 Adipose	Placental GC/MS		1	Not applicable	0.1 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.5%. Value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
35 Kidney	Placental GC/MS		1	Not applicable	0.7 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5%. Value for fetus (20 cm length) of beached harbor porpoise in poor condition	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
36 Liver	Placental GC/MS		1	Not applicable	1.3 ug/g wet wt	In extractable lipids. Liver lipid content 21%. Value for fetus (20 length) of beached harbor porpoise in poor condition	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Benzene, hexachloro-
118-74-1
C-116
HN 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Salmon, coho
CORYPHINUS KISUTCH

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
37 Body, whole		GC	20	16-50 ng/g	36 + or - 9 ng/g	Significant increase in HCB levels with body wt. Average wt 3.56 kg, estimated ages 3-4 yr. Lake Ontario	Niimi, A.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:20-24

CANADA: BIOMACCUMULATION: WATER
EFFECTION: HEXACHLOROBENZENE: FISHES

Fenzeno, hexachloro-
118-74-1
CC-C16
MW 294.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Trout, lake
SALVELINUS NAWAYCUSH

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
38 Body, whole	GC		14	40-120 ng/g	80 + or - 23 ng/g	Significant increase in HCB levels with body wt. Significant increase of % body fat with wt average wt 1.02 kg, estimated ages 2-5 yr.	Nimi, A.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:20-24

Fenzeno, hexachloro-
118-74-1
CC-C16
MW 294.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C
Trout, Finchaw
Salmo Gairdneri

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
39 Body, whole	GC		15	30-125 ng/g	62 + or - 24 ng/g	Significant increase in HCB levels with body wt 1950 average wt 2.32 kg, estimated ages 3-7 yr.	Nimi, A.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:20-24

Fenzo(a) Pyrene
50-32-8
CC-0-H12
MW 222.3, MP 179 C, BP 372 C at 10 mm Hg
Eels, black sea
CENTROPHIUS STRICTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
40 Body, whole	GC UV		Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.23 composite sample of several organisms collected in oil drilling area, depth 57 m	Atlantic Ocean, Baltimore Canyon HYDROCARBONS; NPG JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. 1979 Environmental Science and Technology 13(7): 878-879

Benz(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg
Eutterfish
FAPILLUS TRIACANTHUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
41 Body, whole	GC UV	Not given	< 5 ppb wet wt	Dry wt/wet wt = 0.29 Composite sample of several organisms Collected in oil drilling area, depth 39 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879		

Benz(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg
Flounder, summer
PAPILICHTHYS DENSATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
42 Body, whole	GC UV	Not given	< 1 ppb wet wt	Dry wt/wet wt = 0.21 Composite sample of several organisms Collected in oil drilling area, depth 102 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879		

Benz(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg
Bake, red
AOPHISATZ CRUSS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
43 Body, whole	GC UV	Not given	< 11 ppb wet wt	Composite sample of several organisms Collected in oil drilling area, depth 78 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879		

Fenzo(a)pyrene
50-37-8
C20-H12
MW 232.3, MP 179 C, BP 372 C at 10 mm Hg
Scallop, sea
PLACOPESKIN MAGELLANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
44 Body, whole	GC UV		Not given	< 1 ppb wet wt		Composite sample of several organisms collected in oil drilling area, depth 78 m ATLANTIC OCEAN, Baltimore Canyon HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Fenzo(a)pyrene
50-37-8
C20-H12
MW 232.3, MP 179 C, BP 372 C at 10 mm Hg
Scallop
STENOTHORUS CHRYOSOPS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
45 Body, whole	GC UV		Not given	< 1 ppb wet wt		dry wt/wet wt = 0.26 Composite sample of several organisms collected in oil drilling area, depth 66 m ATLANTIC OCEAN, Baltimore Canyon HYDROCARBONS; NEW JERSEY; BODY; BIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

106
Furbot
JOTA Lora
1,1'-Biphenyl, chloro derivative (9 CI)
EXACT COMPOSITION UNKNOWN OR DETERMINED
Furbot
JOTA Lora

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
46 Liver	GC/MS	a) 9 b) 22	a) 1.2-15.4 ug/g b) 0.04-1.11 ug/g Wet wt	a) 11.1 ug/g b) 0.51 ug/g Wet wt		a) From Churchill Falls Power Plant outfall b) From 8 sites in reservoir and lake area above Power Plant Summer '77 Canada, Labrador, Churchill Falls MCHL PLANTS; CANADA; ADULTS; ADPOSE TISSUE; LIVE; POLYCHLORINATED FIPHENYL; BIOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION	Musiel, C.J. Utne, J.P. Hicks, R.J. Hetheron, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:256-261

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Cattle
CIPRINUS CARPIO

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
47 Muscle			115	a) 0.03-3.68 mg/kg b) 0.03-6.94 mg/kg c) 0.34-12.31 mg/kg d) >0.03-1.83 mg/kg e) >0.03-3.65 mg/kg f) 0.06-10.6 mg/kg	a) 0.80 mg/kg b) 2.3 mg/kg c) 3.7 mg/kg d) 0.59 mg/kg e) 1.5 mg/kg f) 3.0 mg/kg	a) Wt 0.0-2.5 lb, with skin b) Wt 2.5-5.5 lb, with skin c) Wt 25.0 lb, with skin d) Wt 0.0-2.5 lb, without skin e) Wt 2.5-5.5 lb, without skin f) Wt >5.0 lb, without skin Composite fillet samples of each size class.	Hora, M.E. 1981 Bulletin of Environmental Contamination and Toxicology 26:364-366

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Cattle
ECOS SP.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
48 Adipose	Dermal	GC	113	70-2200 ppm	470 ppm	Tailhead fat biopsies of feedlot steers. Exposed to Arochlor 1260 in transformer oil used as backrubber for about 5 mos.	Boss, P.P., Oshana, D.L., Wilson, H.A. 1981 Bulletin of Environmental Contamination and Toxicology 26:485-488

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Crocodile, American
CROCODILUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
49 Eggs		GC-EC	3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.86 ppm b) 0.39 ppm c) 0.20 ppm d) 0.65 ppm e) 0.14 ppm f) 1.4 ppm g) 0.11 ppm h) 0.33 ppm Wet wt	8 clutches, significantly different (< 0.05). shells, contaminants removed. Mean shell thickness 0.19 mm	Hall, R.J., Kaiser, T.P., Robertson, W.B., Jr. Patty, P.C. 1979 Florida, Everglades National Park EGGS: CROCODILES, REPTILES; FLORIDA; CONTAMINATION AND TOXICOLOGY 23:87-90

Biphenyl, chloro (8 CI)
1,1'-Biphenyl, chloro deriva (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Crocodile, American
CROCODILUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
						Eggs: CHORIONIC ORGANIC COMPOUNDS; DDE; DDT; Dieldrin; Heptachlor; Eperoxide; Oxychlordane; Ecychlorinated biphenyls; Bioaccumulation; Water pollution	

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EINACT COMPOSITION UNKNOWN OR UNDETERMINED
 Fider, common

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
50 Eggs	GC		30	0.38-4.30 ppm wet wt	1.60 + or - 1.08 ppm wet wt	Fatchiffe index 1.90-2.38, shell thickness 0.39-0.50 mm, shell wt 7.11-9.99 g, lipid content 15.07-18.03%. Collected 5/77.	Szaro, R.C. Coon, W.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22: 394-399

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EINACT COMPOSITION UNKNOWN OR UNDETERMINED
 Gannet, Norwegian
 MORUS BASSANUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
51 Eggs	GC	a) 10 b) 11	a) 2.1-17 ppm b) 1.8-7.4 ppm Wet wt	a) 7.7 + or - 4.6 ppm b) 3.5 + or - 1.7 ppm	a) 1972 b) 1978	Significant decrease in 6 yr period (F<0.01) No major industries in vicinity of gannetry. Norway, Nordhelle	Piareite, H. Kresseth, S. Bravik, B.H. 1980 Bulletin of Environmental Contamination and Toxicology 24: 142-144

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EINACT COMPOSITION UNKNOWN OR UNDETERMINED
 Gull, great black-backed
 LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
52 Eggs	GC		28	8.0-130.00 ppm wet wt	30.96 + or - 22.3 ppm wet wt	Fatchiffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.22-9.09 g, lipid content 6.0-9.6%. Collected 5/77.	Szaro, R.C. Coon, W.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22: 394-399

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EINACT COMPOSITION UNKNOWN OR UNDETERMINED
 Fider, common

Epiphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EXACT COMPOSITION UNKNOWN OR UNDETERMINED
 GULF, herring
 LARUS ARGENTINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
53 Eggs	GC	a) 30 b) 28	a) 0.00-32.00 ppm b) 0.13-16.70 ppm Net wt	a) 7.76 + or - 6.68 ppm b) 9.06 + or - 3.59 ppm Net wt	a) Batchlife index 1.53-1.98, shell thickness 0.36-0.47 mm, shell wt 5.07-7.49 g, lipid content 6.10-10.20% b) Batchlife index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.64 g, lipid content 6.2-9.7% Collected 5/77.	a) Batchlife index 1.53-1.98, shell thickness 0.36-0.47 mm, shell wt 5.07-7.49 g, lipid content 6.10-10.20% b) Batchlife index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.64 g, lipid content 6.2-9.7% Collected 5/77.	Szaro, R. C., Coon, W. C., Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Epiphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EXACT COMPOSITION UNKNOWN OR UNDETERMINED
 HABIA
 MUSTELA VISON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
54 Adipose	Ingestion	NA	a) 12 b) 11	a) Not given b) Not given	a) 14 + or - 1.9 mg/g b) 310 + or - 25 mg/g	Controls on standard feed containing 0.05 ppm PCB a) Animals fed daily doses of 3300 ug (111 ppm) PCB for 66 days In extractable fat Animals killed 1 wk after parturition, age 1 yr HABIA; CADMIUM; MERCURY; FOUNDRY; CHLORINATED EPHENYL; SWEDEN; ADIPOSE TISSUE; KIDNEYS; MUSCLES; PIOMACUMULATION	Olsson, H., Kihlstrom, J.E., Jansen, S., Oberberg, J. 1979 Ambio 8(1):25

Epiphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EXACT COMPOSITION UNKNOWN OR UNDETERMINED
 FAT, adipose, humpback
 PHOCENA PHOCENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
55 Adipose	GC/MS	Placental	1	Not applicable	59 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duinker, J.C., Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

(NEXT PAGE)

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EXACT COMPOSITION UNKNOWN OR UNDETERMINED
 Porpoise, harbor
 THOCOENA PHOCENA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
56 Kidney	Placental GC/MS	1	Not applicable	34 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Dunker, J.C. Hillebrand, H.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732	
57 Liver	Placental GC/MS	1	Not applicable	50 ug/g wet wt	In extractable lipids. Liver lipid content 2% value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Dunker, J.C. Hillebrand, H.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732	

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro derivs (9 CI)
 1336-36-3
 EXACT COMPOSITION UNKNOWN OR UNDETERMINED
 Staa, American
Alosa sapidissima

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
58 Muscle	GC-ECD	25 1) 32	a) 0.5-11.7 ug/g b) 1.9-19.0 ug/g net wt	a) 2.0 + or - 1.0 b) 6.1 + or - 2.7 ug/g net wt	a) Tappan Zee, 27 mi from river mouth, mean length 47.9 cm b) Rondout-Kill, 75 mi from river mouth, mean length 52.9 cm Collected spring '77.	Pastel, M. Bush, B. Kim, J.S. 1980 Pesticides Monitoring Journal 14(1):11-22	

NEW YORK; MUSCLES; BIOACCUMULATION;

EVIDENTIATORS; FISHES; WATER

EXCRETION; POLYCHLORINATED BIPHENYLS

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro deriva (9 CI)
 EXACT COMPOSITION UNKNOWN OR UNDETERMINED
 Snake, water
Thamnophis sirtalis

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
59 Body Whole			6	1.3-5.8 ppm wet wt	2.9 ppm wet wt	Snout-vent length 646-752 mm, lipid content 3.-9%. Nestling birds in stomachs of 3 snakes contained 0.85-1.3 ppm.	Heinz, G. H. Heseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Lake Michigan, Spider Island SNAKES; MARYLAND; BODY; EXOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; Dieldrin; MERCURY; POLYCHLORINATED ELEPHANTIS

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro deriva (9 CI)
 EXACT COMPOSITION UNKNOWN OR UNDETERMINED
 Snake, water
Nerodia sipedon

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
60 Body Whole			1	Not applicable	4.3 ppm wet wt	Snout-vent length 855 mm, 6.2% lipid content	Heinz, G. H. Heseltine, S.D. Hall, R.J. Krynitsky, A.J. 1980 Lake Michigan, Pilot Island SNAKES; MARYLAND; BODY; EXOACCUMULATION; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; Dieldrin; Mercury; Polychlorinated Biphenyl

Biphenyl, chloro (8 CI)
 1,1'-Biphenyl, chloro deriva (9 CI)
 EXACT COMPOSITION UNKNOWN OR UNDETERMINED
 Trout, lake
Salvelinus namaycush

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
61 Adipose		GC/MS	8	0.37-0.69 ug/g wet wt	0.50 ug/g wet wt	Resentary fat Collected summer '77 in reservoir and lake area above Churchill Falls Plant.	Musial, C.J. Ube, J.P. Wisean, R.J. Matthewson, R.A. 1979 Canada, Labrador, Churchill Falls FISHES; CANADA; ADIPOSE TISSUE; LIPES; POLYCHLORINATED BIPHENYL; EXOACCUMULATION; FISHES; PESTICIDE RESIDUES; WATER POLLUTION

(NEXT PAGE)

Biphenyl, chloro (8 CI)
 1,1'-biphenyl, chloro derivs (9 CI)
 13-16-3
 Exact composition unknown or undetermined
 Trout, lake
Sauvainus namaycush

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
62 muscle	GC		a) 10 b) 10 c) 10	a) Not given b) Not given c) Not given	a) 140 + or - 70 ug b) 90 + or - 40 ug c) 80 + or - 30 ug	Bay Irradiated with Co 60 source, 1000 kilorads (38% PCB loss) Irradiated and broiled to internal temperature of 75 C (43% PCB loss) Fillet Fish wt 0.8-1.2 kg, length 45-52 cm Michigan, Great Lakes Bioaccumulation; FISHES; FOOD CONTAMINATION; IRRADIATION; WATER POLUTION; POLYCHLORINATED BIPHENYL; MUSCLES; MICHIGAN	Cichy, B.P. Zabik, M.Z. Rever, C.N. 1979 Bulletin of Environmental Contamination and Toxicology 22: 807-812

Econ
 740-42-8
 At 10.81, MP 2200 C (approx), BP 2550 C, VP 1.56X10(E-5) atm at 2140 C, 1 mm Hg at 2660 C, 10 mm Hg at 3030 C
 Deer, mule
Cervus canadensis

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
63 Bone	Colorimetry		a) 12 b) 6	a) 0.8-1.8 ppm b) 1.2-3.6 ppm Dry wt	a) 1.4 + or - 0.3 ppm b) 1.4 + or - 3.6 ppm Dry wt	Adults (1.5 yr and older) Fawns (0.5 yr) Betacarpus Significant difference in levels between age groups ($P<0.05$) captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin	Statler, L.H. 1980 Journal of Wildlife Diseases 16 (2): 175-182

Econ
 740-42-8
 At 10.81, MP 2200 C (approx), BP 2550 C, VP 1.56X10(E-5) atm at 2140 C, 1 mm Hg at 2660 C, 10 mm Hg at 3030 C
 Horse, deer
Fomomyscus maculatus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
64 bone	Colorimetry		a) 45 b) 45 c) 45	a) Not given b) Not given c) Not given	a) < or = 2 ppm b) < or = 2 ppm c) < or = 2 ppm Dry wt	Pinyon-Juniper habitat Mountain shrub habitat Big sagebrush habitat captured 6/8 near oil shale tracts before mining initiated whole skeleton. Colorado, Rio Blanco County, Piceance Creek Basin	Statler, L.H. 1980 Journal of Wildlife Diseases 16 (2): 175-182

Cadmium
7440-43-9
Cd
ATW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Antelope, pronghorn
ANTILOPA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
65 Kidney	AAS	21	Not given	1.27 + or - 1.06 ug/g dry wt		Ages < 10-85 yr, assumed healthy. Trend of accumulation with age ($F=0.10$). Vegetation analysis indicates pristine area free from gross pollution.	Hunshouser, F.P. Reagan, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832
66 Liver	AAS	20	Not given	0.30 + or - 0.15 ug/g dry wt		Ages < 10-85 yr Animals assumed to be healthy Vegetation analysis indicates pristine area free from gross pollution.	Hunshouser, F.P. Reagan, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832

Cadmium
7440-43-9
Cd
ATW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Fluegill, Lefchis Macrcchirus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
67 Body, whole	AAS	61	Not given	0.2 ug/g		Fishes, mean length 95 mm, mean dry wt 16.40 g, collected downstream of flood control weir at Algonquin. No major industrial effluents metal input easily from sewage treatment plants and recreational boating. Concentration increase with increasing fish wt.	Vinokour, M.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24: 727-734

ILLINOIS: BOTT; BIOACCUMULATION;
FISHES; WATER POLLUTION; CADMIUM;
CCPAP; LEAD; METALS; ZINC

Illinois, Fox River

Cadmium
7440-43-9
cd
ATW 112-40, MP 321 C, EP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Fullhead, black
TCRABUS MELAS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
68 Body, whole	Ingestion	AAS	10	Not given	0.3 ug/g	Fishes, mean length 172 mm, mean dry wt 41.59 g, collected downstream of fixed control weir at Algomaquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating.	Vinokour, W.S., Goldstein, R.M., Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Cadmium
7440-43-9
cd
ATW 112-40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Cattle
ECS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
69 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.02 + or - 0.002 pp b) < 0.01 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge. Bereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E., Kienholz, E.H., Baxter, J.C., Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
70 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) < 0.013 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge. Bereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E., Kienholz, E.H., Baxter, J.C., Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
71 Kidney	Ingestion	AAS	190	0.02-10.7 ppm wet wt	0.43 + or - 1.07 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region.	Flanck, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
						Australia, New South Wales	Cattle: ASOMIC; CADMIUM; CHEROMIUM; COBALT; COPPER; LEAD; MAGNESIUM; MERCURY; MOLIBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER

(NEXT PAGE)

Cadmium
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 m³ Kg at 394 C, 10 mm Kg at 486 C
Cattle
ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN	SD	
72 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 1.19 + or - 0.14 ppm b) 14.55 + or - 1.24 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase ($P < 0.1$) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E. Kiehboiz, E.W. Faxter, J.C. Spangler, E. Harr, G.M. 1981 Journal of Animal Science 52(1): 108-114
73 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 1.25 ppm b) 0.88 ppm wt wt	a) Pastures fertilized with treated raffinate b) Control Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 465 lb.	Edwards, W.C. Doolley, A.L. 1980 Veterinary and Human Toxicology 22(5): 309-311
74 Liver	Ingestion	AAS	130	< 0.005-0.80 ppm wet wt	0.08 + or - 0.10 ppm wt wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales	Flanck, J. Lee, H.I. 1979 Journal of the Science of Food and Agriculture 30: 533-537
75 Liver	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 0.19 + or - 0.1 ppm b) 4.92 + or - 0.44 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase ($P < 0.1$) in sludge-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E. Kiehboiz, E.W. Baxter, J.C. Spangler, E. Harr, G.M. 1981 Journal of Animal Science 52(1): 108-114

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN		
76 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.23 ppm b) 0.25 ppm wt. wt.	a) Pastures fertilized with treated riffinate b) Controls Grazing 6 mo on plots treated with riffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Artificial 5/79 and 7/79 black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, H.C. Dooley, A.I. 1980 Veterinary and Human Toxicology 22 (5):309-311
						NC Pathological changes	
77 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.05 + or - 0.1 ppm b) 0.48 + or - 0.05 ppm dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase ($P < 0.1$) in sinus-fed steers Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E. Kieholtz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
78 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) 0.03 + or - 0.01 ppm dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E. Kieholtz, E.W. Baxter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
79 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.06 ppm b) 0.08 ppm wt. wt.	a) Pastures fertilized with treated riffinate b) Controls Grazing 6 mo on plots treated with riffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Artificial 5/79 and 7/79 black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, H.C. Dooley, A.I. 1980 Veterinary and Human Toxicology 22 (5):309-311
						NC Pathological changes	

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AN 112-40, MP 321 C, BP 765 C, VP 1 m Hg at 394 C, 10 m Hg at 486 C
Cattle
EOS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
80 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.02 + or - 0 ppm b) 0.43 + or - 0.03 ppm DRY wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase ($P < 0.1$) in sludge-fed steers Harford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COOPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.H. Batter, J.C. Spangler, E. Ward, G.H. 1951 Journal of Animal Science 52(1):108-114

Cadmium
Cd

AN 112-40, MP 321 C, BP 765 C, VP 1 m Hg at 394 C, 10 m Hg at 486 C
Clam, surf
SPISULA SOLIDISSIMA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
81 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 0.23 + or - 0.07 b) 0.32 + or - 0.11 c) 0.50 + or - 0.16 d) 0.25 + or - 0.09 e) 0.44 + or - 0.14 f) 0.93 + or - 0.38 g) 0.17 + or - 0.05 h) 0.22 + or - 0.10 i) 0.19 + or - 0.09	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) controls, 15 d h) controls, 29 d i) controls, 43 d Cd-seawater solutions, a)-e) Controls, in seawater Shells removed before analysis	Gesig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22:643-647

Cadmium
7440-43-9
Cd
ATW 112-40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Crappie, black
CHONDRIS MISGREGULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
82 Body, whole	AAS	26	Not given	0.2 ug/g		Fishes, mean length 109 mm, mean dry wt 18.09 g, collected downstream of Algonquin. No listed control weir at Algonquin. Major industrial effluents, seafarers input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt.	Vinkoul, H.S., Goldstein, R.M., Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Cadmium
7440-43-9
Cd
ATW 112-40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Deer, male
ODONTOCERUS BRUNNEUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
83 Kidney	AAS	24	Not given	2.70 + or - 3.00 ug/g dry wt		Ages < 10-85 mo, assumed healthy. Significant increase with age ($F=0.001$). Vegetation analysis indicates pristine area free from grecs pollution.	Munshower, F.P., Neiman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
84 Liver	AAS	30	Not given	0.51 + or - 0.53 ug/g dry wt		Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, F.P., Neiman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Cadmium
7440-43-9
Cd
ATW 112.40, HP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Grouse, ruffed
FORASIA URSELIUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
85 Feathers	AAS		130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.2 + or - 1.2 b) 0.04 + or - 0.01 c) 0.9/g d) 1.1 or - 1.0 e) 0.9/g f) 0.02 + or - 0.01	a) 77 adults b) 53 Juveniles c) 88 males d) 42 females e) 92 birds, 1977-78 harvest f) 7 birds, 1978-79 harvest King and tail feathers Birds shot by hunters in remote forest areas.	Scalpone, P.P. Oderwald, R.G. Dietrick, T.J. Coogin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25: 947-949

Cadmium
7440-43-9
Cd
ATW 112.40, HP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Rink
BUSIELA VISON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
86 Kidney	Ingestion	HA	a) 12 b) 11	a) Not given b) Not given	a) 260 + or - 30 mg/g b) 410 + or - 70 mg/g	a) Controls on standard feed containing 0.05 ppm PCB (11 ppm) PCB for 66 days Animals killed 1 wk after Parturition, age 1 yr Results indicate synergism of Cd and PCB b) Mink; CADMIUM; MERCURY; KETCHCLORINATED ELPHENYLIS; SWEDEN; ADIPOSE TISSUE; KIDNEYS; MUSCLES; FIOACCUMULATION	Olsson, M. Kihlstrom, J.B. Jensen, S. Oberprieler, J. 1979 Ambio 8 (1): 25

cadmium
 7440-43-9
 Cd
 Ats 112-40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
 Carter
 CHASSOISPA VIRGINICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
87	Body, whole		a) 10	a) Not given	a) 2.9 + or - 0.87	a) 15 d, 10 ppb	Greig, R.A. 1979 BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY 22:643-647
			b) 10	b) Not given	ppb	b) 29 d, 10 ppb	
			c) 10	c) Not given	ppb	c) 43 d, 10 ppb	
			d) 10	d) Not given	ppb	d) 5 d, 20 ppb	
			e) 10	e) Not given	ppb	e) 29 d, 20 ppb	
			f) 10	f) Not given	ppb	f) 43 d, 20 ppb	
			g) 10	g) Not given	ppb	g) Controls, 15 d	
			h) 10	h) Not given	ppb	h) Controls, 29 d	
			i) 10	i) Not given	ppb	i) Controls, 43 d	
					ppb	ppb, seawater, solutions, a) - f)	
					ppb	ppb, in seawater	
					ppb	shells reared before analysis	
					ppb		
					ppb	INCLUSKS; CADMIUM; COPPER; SILVER;	
					ppb	TRACER ELEMENTS; BIOACCUMULATION;	
					ppb	EDDY; COMPARATIVE EVALUATIONS;	
					ppb	CONNECTICUT	

cadmium
 7440-43-9
 Cd
 Ats 112-40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
 Perch, yellow
 PERCA FLAVIPENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
68	Body, whole	AAS	40	Not given	0.2 ug/g	Fishes, mean length 104 mm, mean dry wt 11.22 g, collected downstream of fixed control weir at Algonguin, no major effluents, metal input mainly from sewage treatment plants and recreational boating. No environmental contamination and toxicology change with increasing fish wt.	Vinokour, B.S., Goldstein, B.M., Anderson, R.V. 1980 BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY 24:727-734
						ILLINOIS; BODY; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	
						ILLINOIS, Fox River	

Cadmium
7440-43-9
Cd
AK 112-40, MP 321 C, BP 765 C, VP 1 nm Rg at 394 C, 10 nm Rg at 486 C
Crabog
ARCTICA ISLANDICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
89 Body, whole			a) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 0.31 + or - 0.07 ppb b) 0.37 + or - 0.06 ppb c) 0.55 + or - 0.20 ppb d) 0.36 + or - 0.15 ppb e) 0.37 + or - 0.11 ppb f) 0.72 + or - 0.21 ppb g) 0.25 + or - 0.10 ppb h) 0.27 + or - 0.09 ppb i) 0.31 + or - 0.15 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d	Greig, E.A. 1979 Bulletin of Environmental Contamination and Toxicology 22: 643-647
			b) 10			Cd-seawater solutions, a) - f)	
			c) 10			Controls, in seawater Seawater removed before analysis	
			d) 10				
			e) 10				
			f) 10				
			g) 10				
			h) 10				
			i) 10				

Cadmium
7440-43-9
Cd
AK 112-40, MP 321 C, BP 765 C, VP 1 nm Rg at 394 C, 10 nm Rg at 486 C
Sheep
CVIS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
90 Bone	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 0.02 + or - 0.002 ppm b) 0.01 + or - 0.001 ppm dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed sludge corn grown on soil assayed with 280 dry metric tons/hectare of municipal sewage sludge for 214 days	Hoffron, C.L. Reid, J.T. Elfving, D.C. Stoeward, G.S. Haschek, W.H. Tellford, J.M. Furr, A.K. Parkinson, T.P. Bache, C.A. Gutmann, W.H. Wzolek, P.C. Lisk, D.J. Journal of Agricultural and Food Chemistry 28:58-61
						Liver cell degeneration in sheep fed sludge-grown corn silage	
						SHEEP: JUVENILES; SLUDGES; ANIMAL FED: BIOACCUMULATION; CADMIUM; ZINC; BONES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIES	
91 Brain	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 0.02 + or - 0.00 ppm b) 0.01 + or - 0.00 ppm dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed sludge corn grown on soil assayed with 280 dry metric tons/hectare of municipal sewage sludge for 274 days	Hoffron, C.L. Reid, J.T. Elfving, D.C. Stoeward, G.S. Haschek, W.H. Tellford, J.M. Furr, A.K. Parkinson, T.P. Bache, C.A. Gutmann, W.H. Wzolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

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Cadmium
7440-43-9
Cd
ICN 112, 40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
Ovis sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE
						a) Not given	b) Not given	
92 Heart	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 0.03 + or - 0.00 ppm b) 0.01 + or - 0.00 ppm c) Animals fed sludge corn grown on soil assended with 280 dry metric tons/hectare of municipal sewage sludge for 276 days	a) 0.03 + or - 0.00 ppm b) 0.01 + or - 0.00 ppm c) Dry wt	Beffron, C.L. Reid, J.T. Elving, D.C. Stevens, G.S. Baschek, N.H. Telford, J.M. Purr, A.K. Parkinson, T.P. Bache, C.A. Gutmann, W.H. Wasolek, P.C. Lisk, D.J.	Beffron, C.L. Reid, J.T. Elving, D.C. Stevens, G.S. Baschek, N.H. Telford, J.M. Purr, A.K. Parkinson, T.P. Bache, C.A. Gutmann, W.H. Wasolek, P.C. Lisk, D.J.
93 Kidney	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 18.5 + or - 1.0 ppm b) 5.4 + or - 0.6 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop c) Animals fed silage corn grown on soil assended with 280 dry metric tons/hectare of municipal sewage sludge for 276 days	Beffron, C.L. Reid, J.T. Elving, D.C. Stevens, G.S. Baschek, N.H. Telford, J.M. Purr, A.K. Parkinson, T.P. Bache, C.A. Gutmann, W.H. Wasolek, P.C. Lisk, D.J.	Beffron, C.L. Reid, J.T. Elving, D.C. Stevens, G.S. Baschek, N.H. Telford, J.M. Purr, A.K. Parkinson, T.P. Bache, C.A. Gutmann, W.H. Wasolek, P.C. Lisk, D.J.
94 Liver	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 5.8 + or - 0.3 ppm b) 1.2 + or - 0.2 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop c) Animals fed silage corn grown on soil assended with 280 dry metric tons/hectare of municipal sewage sludge for 276 days	Beffron, C.L. Reid, J.T. Elving, D.C. Stevens, G.S. Baschek, N.H. Telford, J.M. Purr, A.K. Parkinson, T.P. Bache, C.A. Gutmann, W.H. Wasolek, P.C. Lisk, D.J.	Beffron, C.L. Reid, J.T. Elving, D.C. Stevens, G.S. Baschek, N.H. Telford, J.M. Purr, A.K. Parkinson, T.P. Bache, C.A. Gutmann, W.H. Wasolek, P.C. Lisk, D.J.

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Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Sheep
CVS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN	SD	
95 Muscle	Ingestion	ASV	14	a) Not given b) Not given c) Not given d) Not given	a) 0.01 + or - 0.002 ppb b) 0.01 + or - 0.001 ppb c) 0.004 + or - 0.001 ppb d) 0.005 + or - 0.001 ppb Dry wt	a) Animals fed sludge-grown crop, samples (chuck) b) Animals fed sludge-grown crop, samples (round) c) Animals fed control crop, samples (chuck) d) Animals fed control crop, samples (round)	Heffron, C.L. Reid, J.T. Elving, D.C. Stoenzand, G.S. Haschek, W.H. Teiford, J.B. Purr, A.M. Parkinson, T.F. Buche, C.A. Gutierrez, R.H. Wasolek, P.C. Lisk, D.J. 1980 New York, Syracuse Journal of Agricultural and Food Chemistry 28:58-61
96 Spleen	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 0.23 + or - 0.02 ppb b) 0.04 + or - 0.00 ppb Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lamb fed sludge corn grown cm soil seeded with 280 dry metric tons/hectare of municipal sewage sludge for 274 days	Heffron, C.L. Reid, J.T. Elving, D.C. Stoenzand, G.S. Haschek, W.H. Teiford, J.H. Purr, A.M. Parkinson, T.F. Buche, C.A. Gutierrez, R.H. Wasolek, P.C. Lisk, D.J. 1980 New York, Syracuse Liver cell degeneration in sheep fed sludge-grown corn silage SHEEP; JUVENILES; SJUDERS; ANIMAL FEED; BIOACCUMULATION; CARDIUS; ZINC; ECMUS; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSIRES

Radialus
 7440-43-9
 CG
 ATW 112-40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
 Spot
Illiostomus xanthurus

TISSUE	EXPOSURE ROUTE	ANALYTICAL PERIOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN		
97 Brain	AAS		a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.82 + or - 0.33 ug/g b) 2.66 + or - 0.83 ug/g c) 1.16 + or - 0.23 ug/g d) 1.08 + or - 0.18 ug/g e) 0.91 + or - 0.19 ug/g f) 0.65 + or - 0.11 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm.	Hawkins, W.E. Tate, L.G. Saphier, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
98 Gills	AAS		a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 3.03 + or - 0.93 ug/g b) 8.56 + or - 4.30 ug/g c) 4.50 + or - 1.50 ug/g d) 7.53 + or - 2.70 ug/g e) 10.57 + or - 3.68 ug/g f) 1.54 + or - 0.50 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm.	Hawkins, W.E. Tate, L.G. Saphier, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
99 Gut	AAS		a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 4.11 + or - 1.70 ug/g b) 8.28 + or - 1.31 ug/g c) 4.07 + or - 14.10 ug/g d) 52.20 + or - 14.30 ug/g e) 28.54 + or - 2.90 ug/g f) 1.54 + or - 0.23 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm.	Hawkins, W.E. Tate, L.G. Saphier, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
100 Heart	AllS		a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2.49 + or - 0.33 b) 5.64 + or - 1.16 c) At 10 ppb d) At 15 ppb e) At 25 ppb f) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm	a) At 1 ppb b) At 5 ppb c) At 10 ppb d) At 15 ppb e) At 25 ppb f) In distilled water (controls) fish length 12 + or - 2.2 cm	Hawkins, H.E. Tate, J.G. Sarpule, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
						Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppb.	
						Severe damage to proximal tubule cells of kidney at 10-25 ppb.	
101 Kidney	AllS		a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 3.70 + or - 0.30 b) 15.49 + or - 4.69 c) At 10 ppb d) At 15 ppb e) At 25 ppb f) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm	a) At 1 ppb b) At 5 ppb c) At 10 ppb d) At 15 ppb e) At 25 ppb f) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm	Hawkins, H.E. Tate, J.G. Sarpule, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
						Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppb.	
						Severe damage to proximal tubule cells of kidney at 10-25 ppb.	
102 Liver	AllS		a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 8.04 + or - 2.79 b) 11.10 + or - 1.70 c) At 10 ppb d) At 15 ppb e) At 25 ppb f) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm	a) At 1 ppb b) At 5 ppb c) At 10 ppb d) At 15 ppb e) At 25 ppb f) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm	Hawkins, H.E. Tate, J.G. Sarpule, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295
						Disorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppb.	
						Severe damage to proximal tubule cells of kidney at 10-25 ppb.	

Cadmium
7400-43-9
Cd
Atc 112-40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Soot
LEUCOSTOMUS XANTHURUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
103 muscle	AAS		a) 4 b) 4 c) 3 d) 5 e) 6 f) 8	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2.84 + or - 1.91 ug/g b) 2.43 + or - 0.45 ug/g c) 0.64 + or - 0.04 ug/g d) 1.00 + or - 0.44 ug/g e) 0.75 + or - 0.43 ug/g f) 0.77 + or - 0.22 ug/g Dry wt	a) At 1 ppm b) At 5 ppm c) At 10 ppm d) At 15 ppm e) At 25 ppm f) In distilled water (controls) 48 hr exposures fish length 12 + or - 2.2 cm Lisorientation, erratic swimming, lethargy, trailing of mucus from anus. Development of opaque corneas in some fishes at 10-25 ppm. Severe damage to proximal tubule cells of kidney at 10-25 ppm. GILLS: BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SPLEEN; KIDNEY DISEASES; METAL POISONING; BIOACCUMULATION; WATER POLLUTION; FISHES: CADMIUM	Hawkins, R.E. Rate, I.G. Sarph, T.G. 1980 Journal of Toxicology and Environmental Health 6:283-295

Cadmium
7400-43-9
Cd
Atc 112-40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Soot
SANE
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
104 Adrenal gland	Injection	AAS	3	13.8-20.8 ug/g wet wt	17.25 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, 18.5%/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
105 Bile	Injection	AAS	3	0.02-0.12 ug/g wet wt	0.06 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, 18.5%/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
106 Brain	Injection	AAS	3	0.01-0.39 ug/g wet wt	0.24 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, 18.5%/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE
107 Heart	Injection	AAS	3	1.50-34.7 ug/g wet wt	2.58 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	FIGS; SALIVARY GLAND; ADRENAL GLANDS; FILM; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLAND; CANADA; AUTOPSY; CADMIUM; BIOACCUMULATION	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
108 Intestine	Injection	AAS	3	a) 4.82-6.8 ug/g b) 3.56-4.56 ug/g c) 4.46-4.97 ug/g d) 4.23-5.57 ug/g e) 3.43-4.18 ug/g f) 1.89-3.16 ug/g wet wt	a) 6.13 ug/g b) 3.90 ug/g c) 4.75 ug/g d) 5.06 ug/g e) 4.23 ug/g f) 2.71 ug/g wet wt	a) Duodenum b) Colon c) Ileum d) Jejunum e) Cecum f) Rectum Castrated pigs 0.2 mg CdCl ₂ /kg, IM body wt 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	FIGS; SALIVARY GLAND; ADRENAL GLANDS; FILM; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLAND; CANADA; AUTOPSY; CADMIUM; BIOACCUMULATION	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
109 Kidney	Injection	AAS	3	122-218 ug/g wet wt	171 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	FIGS; SALIVARY GLAND; ADRENAL GLANDS; FILM; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLAND; CANADA; AUTOPSY; CADMIUM; BIOACCUMULATION	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
110 Liver	Injection	AAS	3	206-228 ug/g wet wt	216 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	FIGS; SALIVARY GLAND; ADRENAL GLANDS; FILM; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLAND; CANADA; AUTOPSY; CADMIUM; BIOACCUMULATION	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
111 Lung	Injection	AAS	3	6.90-14.60 ug/g wet wt	11.11 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	FIGS; SALIVARY GLAND; ADRENAL GLANDS; FILM; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCREAS; PITUITARY GLAND; SPLEEN; STOMACH; THYROID GLAND; CANADA; AUTOPSY; CADMIUM; BIOACCUMULATION	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115

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Cadmium
7440-43-9
Cd
Atw 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Swine
SUS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
112 Muscle	Injection	AAS	3	a) 0.65-1.59 ug/g b) 0.43-2.44 ug/g Wet wt	a) 1.08 ug/g b) 1.45 ug/g Wet wt	a) Skeletal muscle b) Skeletal muscle, injection site Castrated pigs 0.2 mg CdCl ₂ /kg body wt 5x/wk, IM for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg. PIGS: SALIVARY GLAND; ADRENAL GLANDS; FINN; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; LUNGS; MUSCLES; PANCRAES; PITUITARY GLAND; SLELEN; STOMACH; THYROID GLANDS; CANADA; AUTOPSIRES; CADMIUM; BIOACCUMULATION	Uthe, J.P., Proctor, B.G., Chou, C.L., 1979 Journal of Environmental Sciences and Health A14 (2) : 111-115
113 Pancreas	Injection	AAS	3	76.7-89.9 ug/g wet wt	82.7 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, IM 5x/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P., Proctor, B.G., Chou, C.L., 1979 Journal of Environmental Sciences and Health A14 (2) : 111-115
114 Pituitary	Injection	AAS	3	7.7-10.9 ug/g wet wt	8.8 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, IM 5x/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P., Proctor, B.G., Chou, C.L., 1979 Journal of Environmental Sciences and Health A14 (2) : 111-115
115 Salivary gland	Injection	AAS	3	10.82-15.8 ug/g wet wt	13.61 ug/g wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, IM 5x/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P., Proctor, B.G., Chou, C.L., 1979 Journal of Environmental Sciences and Health A14 (2) : 111-115
116 Spleen	Injection	AAS	3	16.48-20.7 ug/g wet wt	18.11 wet wt	Castrated pigs 0.2 mg CdCl ₂ /kg body wt, IM 5x/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P., Proctor, B.G., Chou, C.L., 1979 Journal of Environmental Sciences and Health A14 (2) : 111-115

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
117 Stomach	Injection	ASS	3	7.04-10.18 ug/g wet wt	8.31 ug/g wet wt	Castrated Pigs 0.2 mg CdCl ₂ /kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115
118 Thyroid Gland	Injection	ASS	3	1.10-6.31 ug/g wet wt	4.10 ug/g wet wt	Castrated Pigs 0.2 mg CdCl ₂ /kg body wt, IM 5X/wk for 12 wk. Initial wt 21.0 kg, estimated wt after 12 wk 86.9 kg.	Uthe, J.P. Proctor, B.G. Chou, C.L. 1979 Journal of Environmental Science and Health A14(2):111-115

Cesium, isotope of mass 137

10045-97-3
Cs
ATN 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C
Squirrel, gray
SCIURUS CAROLINENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
119 Muscle		Radiometry	11	a) 680-1,700 pCi/kg b) 250-29,000 pCi/kg c) 590-20,000 pCi/kg d) 300-20,000 pCi/kg e) 250-7,400 pCi/kg f) 1,200-2,000 pCi/kg g) 1,200-5,900 pCi/kg h) 590-20,000 pCi/kg i) 250-29,000 pCi/kg j) 780-12,000 pCi/kg Set wt.	a) 2,200 + or - 400 b) 5,000 + or - 1,700 c) 4,800 + or - 1,300 d) 4,200 + or - 1,300 e) 2,500 + or - 500 f) 11,000 + or - 4,000 pCi/kg g) 2,900 + or - 1,100 pCi/kg h) 4,200 + or - 1,200 pCi/kg i) 4,700 + or - 1,600 pCi/kg j) 3,500 + or - 1,300 pCi/kg Set wt.	a) Low income stratum b) Middle income stratum c) High income stratum d) Residential area e) Park f) School g) Cemetery h) Age < 1 yr i) Age 1 yr j) Age 2 yr or older Animals captured from 36 urban sites in 1976 Significantly lower values in low-income areas, parks, cemeteries than in school areas.	Jenkins, J.H. Davis, A.H. Bigler, W.J. Hoff, G.L. 1980 Bulletin of Environmental Contamination and Toxicology 25:321-324

Cesium, isotope of mass 137

CS
ATN 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C
Squirrel, gray
SCIURUS CAROLINENSIS

Chromium
7440-47-3
Cc
atW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C
Cattle
ECS spp.

Cobalt
7440-48-4
Cc
atW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C
Cattle
FCS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
120 Kidney	AAS		190	Not detected-0.22 ppm wet wt	0.03 + or - 0.04 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. AUSTRALIA, New South Wales	Planjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
121 Liver	AAS		190	< 0.02-1.0 ppm wet wt	0.05 + or - 0.12 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. AUSTRALIA, New South Wales	Planjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

Cattle
7440-48-4
Cc
atW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C
Cattle
FCS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
122 Kidney	AAS		190	Not detected-0.25 ppm wet wt	0.03 + or - 0.03 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. AUSTRALIA, New South Wales	Planjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
123 Liver	AAS		190	< 0.03-0.45 ppm wet wt	0.07 + or - 0.05 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. AUSTRALIA, New South Wales	Planjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

Copper
7440-50-8

Cu
AtW 63-546, MP 1083 C, BP 2595 C, VP 1 m Hg at 1628 C, 10 m Hg at 1870 C
Antelope, Pronghorn
ANTILLOPAPA MEXICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
124 Kidney	AAS	21	Not given	13.3 + or - 2.8 ug/g dry wt	Ages < 10-85 yo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, P.P. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832	
125 Liver	AAS	20	Not given	26.9 + or - 12.8 ug/g dry wt	Ages < 10-85 yo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, P.P. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832	

Copper
7440-50-8
Cu
AtW 63-546, MP 1083 C, BP 2595 C, VP 1 m Hg at 1628 C, 10 m Hg at 1870 C
Bluegill
LEPOMIS MACROCHIRUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
126 Body, whole	AAS	61	Not given	16.5 ug/g	Fishes, mean length 95 mm, mean dry wt 16.40 g, collected downstream of flood control weir at Altonquin, Mo. major industrial effluents, settled input mainly from sewage treatment plants and recreational boating.	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24: 727-734	

Cu
ATW 63-546, MP 1083 C, BP 2595 C, VP 1 m Hg at 1628 C, 10 m Hg at 1870 C
Fullhead, black
Ictalurus punctatus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
127 Body, whole	AAS		10	Not given	15.8 ug/g	Fishes, mean length 172 mm, mean dry wt 41.59 g, collected downstream of flood control weir at Algoma. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating.	Viniker, H.S. Goldstein, R.M. Anderson, R.V. 1990 Bulletin of Environmental Contamination and Toxicology 24:727-734

Cu
ATW 63-546, MP 1083 C, BP 2595 C, VP 1 m Hg at 1628 C, 10 m Hg at 1870 C
Catfish, channel
Ictalurus punctatus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
128 Blood, cells	Ingestion		9	a) Not given b) Not given	a) 0.37 + or - 0.04 ug/g b) 0.41 + or - 0.09 ug/g Dry wt	a) Unsupplemented diet b) Diet with 32 mg supplemental Cu/kg for 16 wk Initial mean wt 14.5 + or - 1.4 g	Murai, T. Andrews, J.H. Smith, R.G., Jr. 1981 Aquaculture 22:353-357
129 Blood, plasma	Ingestion		9	a) Not given b) Not given	a) 0.54 + or - 0.17 ug/ml b) 0.62 + or - 0.23 ug/ml	Limited growth and feed conversion, reduced hematocrit levels and erythrocyte counts, slight anemia.	Georgia: BLOOD PLASMA; ERYTHROCYTES; LIVER; MUSCLES; BIOACCUMULATION; FISHES; FISHES
130 Liver	Ingestion		9	a) Not given b) Not given	a) 5.0 + or - 1.0 ug/g b) 9.2 + or - 1.2 ug/g Dry wt	a) Unsupplemented diet b) Diet with 32 mg supplemental Cu/kg for 16 wk Initial mean wt 14.5 + or - 1.4 g	Murai, T. Andrews, J.H. Smith, R.G., Jr. 1981 Aquaculture 22:353-357
						Limited growth and feed conversion, reduced hematocrit levels and erythrocyte counts, slight anemia.	Georgia: BLOOD PLASMA; ERYTHROCYTES; LIVER; MUSCLES; BIOACCUMULATION; FISHES; FISHES

Cu Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Catfish, Channel
Ictalurus punctatus

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
131 Muscle	Ingestion	AAS	9	a) Not given b) Not given	a) 1.4 + or - 0.2 ug/g. b) 1.5 + or - 0.2 ug/g. Dry wt	a) Unsupplemented diet b) Diet with 32 mg supplemental Cu/kg for 16 wk Initial mean wt 14.5 + or - 1.4 g Diminished growth and feed conversion, reduced hematocrit levels and erythrocyte counts, slight anemia.	Murai, T. Andrews, J.W. Smith, R.G., Jr. 1981 Aquaculture 22:353-357

Copper
7440-50-8
Cu Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Cattle
Bos taurus
ECS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
132 Blood	Ingestion	AAS	20	a) 0.160-0.320 ppm b) 0.708-1.272 ppm c) 0.155-0.460 ppm d) 0.618-1.314 ppm	a) 0.605 ppm b) 1.023 ppm c) 0.303 ppm d) 0.991 ppm	a) Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, post-test c) Controls, pre-test d) Controls, post-test Grazing 6 mo on plots treated with raffinate (100 lb/acre) or commercial fertilizer (100 lb/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 475 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
133 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.37 + or - 0.4 ppm b) 1.48 + or - 1.16 ppm Dry wt	No pathological changes CATTLE: RAFFINATE; RADIUM 226; RUBIDIUM 220; ARSENIC; CADMIUM; COPPER; LANTHANIDE; NICKEL; CADMIUM; ZINC; BIOACCUMULATION; OKLAHOMA: BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Johnson, D.E. Kienholz, E.H. Baxter, J.C. Spanier, E. Ward, G.H. 1981 Journal of Animal Science 52(1):108-114
134 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 5.2 + or - 0.5 ppm b) 5.7 + or - 0.8 ppm Dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Bereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E. Kienholz, E.H. Baxter, J.C. Spanier, E. Ward, G.H. 1981 Journal of Animal Science 52(1):108-114

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	GENERAL INFORMATION		REFERENCE		
				RANGE	MEAN			
135 Kidney	Ingestion	AAS	190	1.84-9.2 ppm wet wt 3.90 + or - 0.98 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales	Planjat, J. Lee, H.Y. 1975 Journal of the Science of Food and Agriculture 30:503-507		
136 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	CATTLE: ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SILVER; ZINC; AUSTRALIA; KIDNEYS; LIVER	Johnson, D.E. Kienholz, E.W. Barker, J.C. Spangler, E. Ward, G.H. 1981 Journal of Animal Science 52(1): 108-114		
137 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 23 + or - 0.5 ppm b) 21 + or - 0.04 ppm dry wt	CATTLE: SEDIMENT; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SILVER; ZINC; BIOACCUMULATION; ERINIA; KIDNEYS; LIVER; LUNGS; BONES; MUSCLES; SPERM; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5): 309-311	
138 Liver	Ingestion	AAS			a) 9.52 ppm b) 5.16 ppm net wt	No pathological changes	CATTLE: BAFITINATE; RADIN 226; THORIUM 230; ARSENIC; CADMIUM; COBALT; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CHLOROMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Planjat, J. Lee, H.Y. 1975 Journal of the Science of Food and Agriculture 30:503-507
139 Liver	Ingestion	AAS			18.0 + or - 15.6 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales	CATTLE: ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SILVER; ZINC; AUSTRALIA; KIDNEYS; LIVER	Johnson, D.E. Kienholz, E.W. Barker, J.C. Spangler, E. Ward, G.H. 1981 Journal of Animal Science 52(1): 108-114
					0.81-82.8 ppm wet wt		CATTLE: SEDIMENT; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SILVER; ZINC; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	

COPPER
7440-50-8
Cu
Atw 63.5446. MP 1083 C, BP 2595 C, VP 1 ■■■ Hg at 1628 C, 10 ■■■ Hg at 1870 C
Cattle
ECS sp.

(CONTINUED)

Tissue	Exposure Route	Analytical Method	Number of Cases	Ranges		Mean	General Information	Reference
				a)	b)			
140 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 21.17 ppm b) 35.35 ppm	Ret wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 m on plots treated with raffinate (100 lb/M-acre) or commercial fertilizer (100 lb/M-acre). Applied 5/79 and 7/79 Black, white-faced calves, seen Pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.J. 1980 Veterinary and Human Toxicology 22(5):309-311
							No pathological changes	
							CATTLE; RAPHTHATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CHLOROFORM; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	
141 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 7.1 + or - 0.2 ppm b) 7.1 + or - 0.4 ppm	Dry wt	a) Control diet b) Diet of 1% high Cd sewage sludge, 106 days Bereford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Kienholz, E.W. Barker, J.C. Spangler, B. Hard, G.M. 1981 Journal of Animal Science 52(1):108-114
							CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; Cadmium; COPPER; LEAD; MERCURY	
142 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 3.6 + or - 0.43 ppm b) 3.2 + or - 0.18 ppm	Dry wt	a) Control diet b) Diet of 1% high Cd sewage sludge, 106 days Bereford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E. Kienholz, E.W. Barker, J.C. Spangler, B. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
							CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; Cadmium; COPPER; LEAD; MERCURY	
143 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 5.07 ppm b) 3.62 ppm	Ret wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 m on plots treated with raffinate (100 lb/M-acre) or commercial fertilizer (100 lb/M-acre). Applied 5/79 and 7/79 Black, white-faced calves, seen Pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.J. 1980 Veterinary and Human Toxicology 22(5):309-311
							No pathological changes	
							CATTLE; RAPHTHATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CHLOROFORM; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	

(NEXT PAGE)

COPPER

7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 CCattle
Cattle
ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
144 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 4.4 + or - 0.14 ppm b) 4.8 + or - 0.20 ppm dry wt	a) Control diet of 12% high Cd sewage sludge, 106 days Herdord Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE: SLUGGERS; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.N. Batter, J.C. Spangler, E. Ward, G.H. 1981 Journal of Animal Science 52(1): 108-114

Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Clay, surf
SEPSULA SOLIDISSIMA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
145 body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 1.8 + or - 0.43 ppb b) 2.7 + or - 1.18 ppb c) 3.2 + or - 0.71 ppb d) 2.9 + or - 1.17 ppb e) 3.8 + or - 0.94 ppb f) 6.9 + or - 2.38 ppb g) 1.1 + or - 0.28 ppb h) 0.7 + or - 0.32 ppb i) 1.1 + or - 0.34 ppb	a) 15 d, 10 Fpb b) 29 d, 10 Fpb c) 43 d, 10 Fpb d) 15 d, 20 Fpb e) 29 d, 20 Fpb f) 43 d, 20 Fpb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d Co-seawater solutions, a)-f) Shells removed before analysis	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22: 643-647

Copper
7440-50-8
Cu
Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Crappie, black
POHONIX NIGROMACULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
146 body, whole		AAS	26	Not given	27.5 ug/g	Fishes, mean length 109 mm, mean dry wt 18.09 g, collected downstream of treated control weir at Argonquah. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt. Illinois, Fox River	Vinokour, W.S., Goldstein, B.M., Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24: 727-734

ILLINOIS: BODY: BIOACCUMULATION;
FISHES: WATER POLLUTION: CADMIUM;
COPPER: LEAD: ZINC

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
147 Abdomen	AAS	1 a) 4 b) 4 c) 4 d) 4 e) 4 f) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 85 ppm b) 120 ppm c) 130 ppm d) 160 ppm e) 210 ppm f) 260 ppm	a) At 0 ppm b) At 0.1 ppm c) At 0.5 ppm d) At 1.0 ppm e) At 2.0 ppm f) At 3.0 ppm	48 hr exposure levels Adults, acclimated to 25 C in pond water for 24 hr before exposure.	Evans, M. L. 1980 Bulletin of Environmental Contamination and Toxicology 24:916-920
148 Body, whole	AAS	66 a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 120 ppm b) 130 ppm c) 170 ppm d) 180 ppm e) 220 ppm f) 250 ppm	a) At 0 ppm b) At 0.1 ppm c) At 0.5 ppm d) At 1.0 ppm e) At 2.0 ppm f) At 3.0 ppm	48 hr exposure levels Adults, acclimated to 25 C in pond water for 24 hr before exposure.	Evans, M. L. 1980 Bulletin of Environmental Contamination and Toxicology 24:916-920
149 Claws	AAS	1 a) 4 b) 4 c) 4 d) 4 e) 4 f) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 77 ppm b) 89 ppm c) 120 ppm d) 120 ppm e) 150 ppm f) 170 ppm	a) At 0 ppm b) At 0.1 ppm c) At 0.5 ppm d) At 1.0 ppm e) At 2.0 ppm f) At 3.0 ppm	48 hr exposure levels Adults, acclimated to 25 C in pond water for 24 hr before exposure.	Evans, M. L. 1980 Bulletin of Environmental Contamination and Toxicology 24:916-920
150 Thorax	AAS	1 a) 4 b) 4 c) 4 d) 4 e) 4 f) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 180 ppm b) 210 ppm c) 250 ppm d) 280 ppm e) 300 ppm f) 350 ppm	a) At 0 ppm b) At 0.1 ppm c) At 0.5 ppm d) At 1.0 ppm e) At 2.0 ppm f) At 3.0 ppm	48 hr exposure levels Adults, acclimated to 25 C in pond water for 24 hr before exposure.	Evans, M. L. 1980 Bulletin of Environmental Contamination and Toxicology 24:916-920

CCP peer
740-10-8
Cu TH 63.5% MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Tear, Rule
CROCODILUS MENTONIUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	HUBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
151 Kidney	AAS		24	Not given	29.5 + or - 16.4 ug/g dry wt	Ages < 10-85 yr, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshover, P.P. Reuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832
152 Kidney	AAS	a) 12 b) 6	a) 15-65 ppm b) 23-32 ppm Dry wt	a) 28.6 + or - 15.0 b) 26.5 + or - 4.0 PPM DRY WT	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin	DIER MICE: MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; ECNEES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16 (2): 175-182
153 Liver	AAS	29	Not given	46.3 + or - 29.1 ug/g dry wt	Ages < 10-85 yr, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Pentana, Northern Great Plains DIER MICE: MULE DEER; BORON; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshover, P.P. Reuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832
154 Liver	AAS	a) 12 b) 6	a) 19-114 ppm b) 45-227 ppm Dry wt	a) 61.4 + or - 34.0 b) 97.3 + or - 59.6 PPM DRY WT	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin	DIER MICE: MULE DEER; BORON; COPPER; FLUORIDE; MOLYBDENUM; COLORADO; ECNEES; KIDNEYS; LIVER	Stetler, L.H. 1980 Journal of Wildlife Diseases 16 (2): 175-182

COPPER
7440-50-8

Cu
Atw 63.546, BP 1083 C, VP 2595 C, Wt 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Grouse, ruffed
ECMASIA URIBELIUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
155 Feathers	AAS		130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 4.0 + or - 0.2 ug/g b) 4.4 + or - 0.4 ug/g c) 88 males 42 females d) 47 birds, 1977-78 harvest e) 82 birds, 1978-79 harvest f) 47 birds, 1978-79 harvest Wing and tail feathers Birds shot by hunters in remote forest area.	3) 77 adults 4) 53 juveniles 5) 88 males 6) 42 females 7) 3.6 + or - 0.2 ug/g 8) 3.9 + or - 0.2 ug/g 9) 4.6 + or - 0.4 ug/g Dry wt	Scanlon, P.P. Oderwald, R.G. Dietrick, T.J. Coggin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25: 947-949

Copper
7440-50-8
Cu
Atw 63.546, BP 1083 C, VP 2595 C, Wt 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
House, deer
FICIMYCUS MANICULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
156 Kidney	AAS		45	a) 18-37 ppm b) 18-36 ppm c) 21-27 ppm Dry wt	a) 22.0 + or - 4.4 ppm b) 22.7 + or - 2.3 ppm c) 22.6 + or - 2.1 ppm Dry wt	a) Pinon-Juniper habitat b) Mountain shrub habitat c) Big sagebrush habitat Captured 6/78 near oil shale tracts before mining initiated Organ of choice for baseline sampling.	Steller, L.H. 1980 Journal of Wildlife Diseases 16 (2): 175-182
157 Liver	AAS		45	a) 19-29 ppm b) 20-32 ppm c) 18-249 ppm Dry wt	a) 23.3 + or - 2.4 ppm b) 75.4 + or - 16.9 ppm c) 40.1 + or - 56.0 ppm Dry wt	a) Pinon-Juniper habitat b) Mountain shrub habitat c) Big sagebrush habitat Captured 6/78 near oil shale tracts before mining initiated.	Steller, L.H. 1980 Journal of Wildlife Diseases 16 (2): 175-182

COPPER
7440-50-8
Cu
ATW 63-546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1670 C
Oyster

COPPER
7440-50-8
Cu
ATW 63-546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1670 C
Copper, yellow
SEARCH, JELLION
PERCA FLAVISCENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
158 Body, whole		a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 60.9 + or - 23.1 ppb b) 67.2 + or - 14.8 ppb c) 84.3 + or - 23.0 ppb d) 67.0 + or - 20.9 ppb e) 87.7 + or - 25.7 ppb f) 117.7 + or 20.5 ppb g) 60.3 + or - 13.2 ppb h) 58.1 + or - 21.7 ppb i) 69.5 + or - 27.5 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 23 d i) Controls, 43 d Cu-seawater solutions, a)-f) Controls, in seawater shells removed before analysis		Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22: 643-647
159 Body, whole		a) 11.1-46.3 ug/g b) 9.6-42.9 ug/g c) 13.7-246.0 ug/g d) 72.6-199.2 ug/g e) 4.8-37.8 ug/g f) 9.9-28.6 ug/g g) 5.1-14.4 ug/g h) 2.7-37.6 ug/g i) 8.9-36.2 ug/g j) 16.1-17.0 ug/g k) 1.5-7.9 ug/g DRY wt	a) 22.7 + or - 11.5 ug/g b) 25.4 + or - 10.7 ug/g c) 106.0 + or - 61.9 ug/g d) 115.7 + or - 43.1 ug/g e) 17.9 + or - 11.3 ug/g f) 16.8 + or - 6.7 ug/g g) 10.4 + or - 3.7 ug/g h) 16.3 + or - 15.4 ug/g i) 21.2 + or - 14.2 ug/g j) 29.9 + or - 14.7 ug/g k) 4.9 + or - 3.2 ug/g DRY wt	a) Wando River, south, 7 samples b) Wando River, site 4, 6 samples c) Wando River, site 8, 4 samples d) Wando River, site 10, 8 samples e) Charleston Harbor, 10 samples f) South Wando Creek, 6 samples g) North Santee Bay, 6 samples h) Fishing Creek, 4 samples i) St. Helena Sound, 4 samples j) Ashley River, 4 samples k) Bulls Bay, 3 samples Significantly higher levels in Wando River oysters than in others. Shifted possible Cu source 2 or more oysters/sample. Mean sample wt 12.26 g.		Matthews, T.D. Boyne, J.V. Davis, R.A. Simmons, D.B. 1979 Journal of Environmental Science and Health A1 (3): 683-694	

COPPER
7440-50-8
Cu
ATW 63-546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1670 C
COPPER, IRON; BIOACCUMULATION; WATER POLLUTION

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
160 Body, whole		AAS	40	Not given	20 ug/g		Vinokour, W.S., Goldsman, R.H., Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24: 727-734

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
							ILLINOIS: RIVER; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; IRON; BIOACCUMULATION; WATER POLLUTION

COPPER
LH
AN 63.546, BP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Quabog
ARCTICA ISLANDICA

COPPER
77440-50-8
Cu
atw 63.546
sheep

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	GENERAL INFORMATION		REFERENCE
				RANGE	MEAN	
162 Blood, plasma	AAS		9	22.02-76.3 $\mu\text{mol/l}$	43.6 $\mu\text{mol/l}$	<p>From sick sheep on Nigerian government farm where chronic Cu poisoning had occurred. Normal levels 9.4-18.8 $\mu\text{mol/l}$</p> <p>Nigeria, Maquba</p> <p>Jaundice, edema eads, anæmia</p> <p>Congested liver, kidney lesions - massive haemosiderin in kidneys, spleen and lymph nodes.</p> <p>KIDNEY DISEASES; LIVER DISEASES; METAL POISONING; COPPER; AFRICA; SHEEP</p>

COPPER
Cu
AKW 63-546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1626 C, 10 mm Hg at 1870 C
Swan, Sute
CIRGUS OLCR

EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
163 Kidney Ingestion	AAS	a) 18 b) 11	a) 4-190 ug/g b) 11-42 ug/g DRY wt	a) 44 ug/g b) 145 ug/g DRY wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kingdom, River Trent	Simpson, V.R. Hunt, A.Z. 1979 Environmental Pollution 18:187-202
					Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. FINDS: SWANS: UNITED KINGDOM; LEAD POISONING; BEES: BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	
164 Liver Ingestion	AAS	a) 18 b) 11	a) 290-9200 ug/g b) 600-6250 ug/g DRY wt	a) 3660 ug/g b) 2790 ug/g DRY wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands. United Kingdom, River Trent	Simpson, V.R. Hunt, A.Z. 1979 Environmental Pollution 18:187-202
					Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss. FINDS: SWANS: UNITED KINGDOM; LEAD POISONING; BEES: BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	

COPPER
7440-50-8
Cu
AW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
165 Blood, Plasma	Ingestion	a) 9 b) 9 Wet wt	a) 1-7-3-0 PPM b) 1-5-2-9 PPM	a) Not given b) Not given		From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO ₄ as growth prosoxant. Estimated death losses, 400 of 2000 pigs during 10.5 mo.	Hatch, R.C. Blue, J.L. Baffey, P.A. Jain, A.V. Smalley, R.E. 1979 Journal of the American Veterinary Medical Association 174 (6): 616-619
						Georgia (N) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, selena, weakness, pallor.	
						Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia.	
166 Kidney	Ingestion	2	5.0-19.5 PPM wet wt	12.3 PPM wet wt		From group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO ₄ as growth prosoxant. Estimated death losses, 400 of 2000 pigs during 10.5 mo.	Hatch, R.C. Blue, J.L. Baffey, P.A. Jain, A.V. Smalley, R.E. 1979 Journal of the American Veterinary Medical Association 174 (6): 616-619
						Georgia (N) Chronic Cu toxicosis manifested as Fe deficiency anemia. Anorexia, weight loss, selena, weakness, pallor.	
						Discolored liver, hepatic centrilobular necrosis, ulcers of gastric cardia, pale muscles, watery blood, reddened bone marrow, splenic myeloid metaplasia.	
						SWINE: GEORGIA; METAL POISONING; BLOOD; BLOOD PLASMA; FECES; KIDNEYS; LIVER; ARSENIC; COPPER; LEAD; EIOCCUMULATION; FOOD ADDITIVES	

(NEXT PAGE)

COPPER
7440-50-8
Cu Atw 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Swine SUS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE
167 Liver	Ingestion		3	100-170 ppm wet wt	133.3 ppm wet wt	Significantly higher levels than in livers obtained from grocery stores (0.8-6.3 ppm) from group of growing Yorkshire crossbreeds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO ₄ as growth promoter. Estimated death losses, 400 of 2000 pigs during 10-5 mo.	Hatch, R.C. Blue, J.L. Mahaffey, S.A. Jain, A.V. Smalley, R.E. 1979 Journal of the American Veterinary Medical Association 174 (6):616-619	Georgia (8)

Crocosite
E001-88-9
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
F 195-400 C
Lobster
Homarus americanus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE	
168 Hepatopancreas			a) 2 b) 2 c) 2 d) 2 e) 2 f) 2	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 47,500 ug b) 23,700 ug c) 10,850 ug d) 7,120 ug e) 3,220 ug f) 670 ug	Values/g lipid	a) 100 hr in 2.5 mg/l b) 165 hr in 1.3 mg/l c) 120 hr in 0.3 mg/l d) 100 hr in 0.3 mg/l e) 25 hr in 0.3 mg/l f) Controls in seawater Solutions in seawater Adults, wt 4-20 g	McLean, D.H. Metcalfe, C.D. 1976 Bulletin of Environmental Contamination and Toxicology 22:796-799	lobsters at 2.5 mg/l and 1.3 mg/l exposures died within 2 and 6 hr after sampling.

ICESTERS; CROSCOTE; HEPACOPANCRAS;
CANADA; ADULS; BIACCUMULATION

Cyclohexane, 1,2,3,4*,5,6-hexachloro-, alpha- (8 CI)
 Cyclohexane, 1,2,3,4*,5,6-hexachloro-, (alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
 C6-06-C16
 319-84-6
 MW 290.83, MP 139.5-160 °C, BP 288 °C, VP 0.02 mm Hg at 20 °C
 Fcrouise, Harbor
 PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
169 Adipose	Placental GC/MS		1	Not applicable	0.3 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.5% value for fetus (length 20 cm) of beached harbor porpoises in poor condition	Duinker, J.C. Hillebrand, H.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
170 Kidney	Placental GC/MS		1	Not applicable	0.2 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% value for fetus (length 20 cm) of beached harbor porpoises in poor condition	Duinker, J.C. Hillebrand, H.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
171 Liver	Placental GC/MS		1	Not applicable	0.3 ug/g wet wt	In extractable lipids. Liver lipid content 21% value for fetus (length 20 cm) of beached harbor porpoises in poor condition	Duinker, J.C. Hillebrand, H.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Cyclohexane, 1,2,3',4,5',6'-hexachloro-, gamma-(8 CI),
 Cyclohexane, 1,2,3',4,5',6'-hexachloro-, (Alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
 CS-86-C16
 58-89-9
 MW 290, 85.
 MP gamma-isomer-crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C
 Porpoise, harbor
 PROCOPA PHOCOZA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE
172 Adipose	Placental	GC/MS	1	Not applicable	0.2 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duinker, J.C., Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732	
173 Kidney	Placental	GC/MS	1	Not applicable	1.5 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duinker, J.C., Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732	
174 Liver	Placental	GC/MS	1	Not applicable	21 ug/g wet wt	In extractable lipids. Liver lipid content 21% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duinker, J.C., Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732	

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI)
 Cyclohexane, 1,2,3,4,5,6-hexachloro-, (alpha, zeta, 3beta, 4alpha, 5alpha, 6beta) - (9 CI)
 58-89-9
 C6H₁₂-16
 MW 290-85. MF gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, bp 0.14 mm Hg at 40 C
 Swine
 SUS sp.

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
175 Blood, serum	Ingestion		1	Not given	0.002 ppm	<p>Accidental contamination of food by insecticide spray (45% toxophene and 2% lindane). Slobbering, vomiting, muscle tremors, staggering. Periodic convulsions. Death 2 hr after onset of symptoms.</p> <p>FIGS: KANSAS: AUTOPSY; NEUROPSYCHIC DISEASES; BLOOD SERUM; BRAIN; INSECTICIDES; HYDROCARBONS; INSERGICIDES; LINDANE; EIOACCUMLATION</p>
176 Brain	Ingestion		1	a) Not given b) Not given	a) 0.02 ppm b) 0.03 ppm	<p>Accidental contamination of food by insecticide spray (45% toxophene and 2% lindane). Slobbering, vomiting, muscle tremors, staggering. Periodic convulsions. Death 2 hr after onset of symptoms.</p> <p>FIGS: KANSAS: AUTOPSY; NEUROPSYCHIC DISEASES; BLOOD SERUM; BRAIN; INSECTICIDES; HYDROCARBONS; INSERGICIDES; LINDANE; EIOACCUMLATION</p>

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN	SD	
177 Body, whole			2	Not given	12 ppb		5 g earthworms/samples Collected near contaminated areas 2 yr after explosion in chemical plant. MICE; TOADS; SNAKES; HARES; RABBITONS; ITALI; ADIPOSE TISSUE; REDDY; LIVER; HERBICIDES; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS Panelli, R. Castelli, M.G. Martelli, G.P. Roseda, A. Gattai, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:460-462

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI)
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (9 CI)
1746-01-6
C12-H₄-Cl₄-O₂
FW 322, MP 305 C
Rare

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
178 liver			5	2.7-13 ppb	7.7 ppb	Collected in and near contaminated area 2 yr after explosion in Chemical Plant. Italy, Seveso	Panelli, R., Castell, H.G., Martelli, G.P., Noseda, A., Garattini, S. 1980 BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY 24: 460-462

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI)
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (9 CI)
1746-01-6
C12-H₄-Cl₄-O₂
FW 322, MP 305 C
House, field
TRICORDUS ARVALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
179 Body, whole		GC/MS	14	0.07-49 ppb	4.5 ppb	Collected in contaminated area (C010-12 ppf) in top 7 cm of soil 2 yr after explosion in chemical plant. Italy, Seveso	Panelli, R., Castell, H.G., Martelli, G.P., Noseda, A., Garattini, S. 1980 BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY 24: 460-462

Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (8 CI)
Dibenzo-p-dioxin, 2,3,7,8-tetrachloro- (9 CI)
1746-01-6
C12-H₄-Cl₄-O₂
FW 322, MP 305 C
Snake

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
180 Adipose			1	Not applicable	16 ppb	Collected near contaminated area 2 yr after explosion in chemical plant. Italy, Seveso	Panelli, R., Castell, H.G., Martelli, G.P., Noseda, A., Garattini, S. 1980 BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY 24: 460-462
181 Liver			1	Not applicable	2.7 ppb	Collected near contaminated area 2 yr after explosion in chemical plant. Italy, Seveso	Panelli, R., Castell, H.G., Martelli, G.P., Noseda, A., Garattini, S. 1980 BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY 24: 460-462

Dibenzo-P-dioxin, 2,3,7,8-tetrachloro- (8 CI)
 Dibenzo(b,e) (1,4) dioxin, 2,3,7,8-tetrachloro- (9 CI)
 1136-01-6
 C12-H8-Cl4-02
 RW 322, HS 305 C
 Tcad

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
182 Body, whole			1	Not applicable	0.2 ppb	Collected near contaminated area 2 yr after explosion in chemical plant. Italy, Seveso	Fanelli, R.; Castelli, M.G.; Martelli, G.P.; Noseca, A.; Carattini, S.; 1980 EICE; TOADS; SNAKES; HAIR; FISH; BIRDFOOD; LIVER; ADIPOSE TISSUE; EGGS; LIVER; HERBICIDES; INDUSTRIAL ACCIDENTS; CHLORINE ORGANIC COMPOUNDS Toxicology 24: 460-462

Ethane, 1,1-dichloro-2-(*o*-chlorophenyl)-2-(*p*-chlorophenyl)- (8 CI)
 Benzene, 1-chloro-2-(2,2-dichloro-1-(*o*-chlorophenyl)ethyl)- (9 CI)
 C14-H10-Cl4
 MN 320-05-7, MF 76-78 C
 Porpoise, harbour
 ERGOGENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
183 Adipose	Placental	GC/MS	1	Not applicable	2.5 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duijker, J.C.; Hillebrand, M.T.J.; 1979 Bulletin of Environmental Contamination and Toxicology 23: 728-732
184 Kidney	Placental	GC/MS	1	Not applicable	1.3 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duijker, J.C.; Hillebrand, M.T.J.; 1979 Bulletin of Environmental Contamination and Toxicology 23: 728-732
185 Liver	Placental	GC/MS	1	Not applicable	3.4 ug/g wet wt	In extractable lipids. Liver lipid content 2% value for fetus (20 cm) of harbour porpoise stranded on beach in poor condition	Duijker, J.C.; Hillebrand, M.T.J.; 1979 Bulletin of Environmental Contamination and Toxicology 23: 728-732

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
 7-2-54-8
 C14-H10-Cl4
 MW 350.46, MP 221-222 C
 Crocodile, American
CROCODILIUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
186 Eggs	GC-ECD	a) 3 b) 3 c) 3 d) 5 e) 2 f) 3 g) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.04 ppm b) 0.05 ppm c) 0.01 ppm d) 0.07 ppm e) 0.01 ppm f) 0.01 ppm g) 0.05 ppm	0.04 ppm	8 clutches, significantly different (F < 0.05). Shells, warthans removed. Mean shell thickness 0.19 mm	Hall, R.J., Kaiser, T.P., Robertson, H.B., Jr., Patti, P.C. 1979 Florida, Everglades National Park Bulletin of Environmental Contamination and Toxicology 23: 87-90
						Eggs: CROCOCLES; REPTILES; FLORIDA; MAYLAND; CHLORINE ORGANIC COMPOUNDS; EIV; DDE; DED; DEDRN; HEPAchlor EFOHOL; OXICHORDONE; PCYCLOCLOINATED BIPHENYLS; BIOACCUMULATION: WATER POLLUTION	

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
 7-2-54-8
 C14-H10-Cl4
 MW 350.46, MP 221-222 C
 Grebe, Western
HECHOPHORUS OCCIDENTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
187 Adipose	GC	18	0.5-16.4 ppm wet wt	5.2 ppm wet wt	5.2 ppm wet wt	Visceral fat in birds with sparse or no visceral fat Collected 1973-74.	Lindwall, M. Low, J.S. 1979 Utah, Bear River Migratory Bird Refuge Bulletin of Environmental Contamination and Toxicology 22: 154-160
						BIRDS: EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAE; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; PCYCLOCLOINATED BIPHENYLS	
188 Blood	GC	16	Not detected-0.20 ppm wet wt	0.07 ppm wet wt	0.07 ppm wet wt	Collected 1973-74.	Lindwall, M. Low, J.S. 1979 Utah, Bear River Migratory Bird Refuge Bulletin of Environmental Contamination and Toxicology 22: 154-160
						BIRDS: EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAE; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; PCYCLOCLOINATED BIPHENYLS	
189 Eggs	GC	40	0.3-4.7 ppm wet wt (3-52 ppm lipid wt)	1.3 + or - ppm wet wt (14.9 + or - 3.1 ppm lipid wt)	Average shell thickness index 1.898 + or - 0.015 mm. 2.3% decrease from Pre-DDT use Period Collected 1973-74.	Lindwall, M.L. Low, J.S. 1980 Utah, Bear River Migratory Bird Refuge Pesticides Monitoring Journal 14(3): 108-111	
					No detectable effects on reproduction.		
					Eggs: BIRDS; UTA; CHLORINE ORGANIC COMPOUNDS; DDE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES		

(NEXT PAGE)

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
 7-51-8
 C14-H10-C14
 MW 350.46, MF 221-222 C

Gerb, Western ARCHOPHOROUS OCCIDENTALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN		
190 Eggs		GC	40	1.0-21.4 ppm wet wt (20-275 ppm lipid wt)	6.6 ppm wet wt (76.5 ppm lipid wt)	Whole eggs Collected 1973-74.	Lindwall, M. Low, J.B. 1979 Utah, Bear River Migratory Bird Refuge EIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAB; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; FOLICHLORINATED EPHENYLS
191 Muscle		GC	24	<0.1-6.0 ppm wet wt (2-171 ppm lipid wt)	0.8 ppm wet wt (29 ppm lipid wt)	FREEST. MUSCLE Collected 1973-74.	Lindwall, M. Low, J.B. 1979 Utah, Bear River Migratory Bird Refuge EIRDS; EGGS; ADIPOSE TISSUE; BLOOD; MUSCLES; UTAB; BIOACCUMULATION; PESTICIDE RESIDUES; DDD; DDE; FOLICHLORINATED EPHENYLS

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(2,2-dichloroethylidene)bis(4-chloro- (9 CI)
 7-51-8
 C14-H10-C14
 MW 350.46, MF 221-222 C
 Gull, Great black-backed
 LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE
192 1995		GC	28	0.0-0.15 ppm wet wt	0.01 + or - 0.01 ppm wet wt	Fatcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.2-9.09 g. Lipid content 6.0-5.6%. Collected 5/77.	Szaro, R.C. Coon, M.C. Kohle, E.C. 1979 Maine, Appledore Island	Bulletin of Environmental Contamination and Toxicology 22: 394-399

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 Cl)
 Benzene, 1,1-(2,2-dichloroethylidene)bis(4-chloro- (9 Cl)
 72-54-8
 C14-H10-Cl4
 # 350-46, MF 221-222 C
 Porpoise, harbor
 PHOCOENA PHOCOENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
193 Adipose	Placental	GC/MS	1	Not applicable	2.5 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% value for fetus (20 cm) of beached harbor porpoise in poor condition Netherlands, Texel	Duinker, J.C. Hillebrand, H.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
194 Kidney	Placental	GC/MS	1	Not applicable	1.5 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% wet wt value for fetus (20 cm) of beached harbor porpoise in poor condition Netherlands, Texel	Duinker, J.C. Hillebrand, H.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
195 Liver	Placental	GC/MS	1	Not applicable	3.5 ug/g wet wt	In extractable lipids. Liver lipid content 21% value for fetus (length 20 cm) of beached harbor porpoise in poor condition Netherlands, Texel	Duinker, J.C. Hillebrand, H.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 Cl)
 Benzene, 1,1-(2,2-dichloroethylidene)bis(4-chloro- (9 Cl)
 5C-29-3
 C14-H9-Cl5
 # 354-50, MF 108.5-109 C, BP 260 C, VP 1.5X10 (E-7) mm Hg at 20 C
 Crocodile, American
 CROCODILIUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
196 Eggs		GC-EC	8 clutches, significantly different ($P < 0.05$) Shells, membranes removed. Mean shell thickness 0.49 mm	a) 0.05 ppm b) 0.04 ppm c) 0.02 ppm d) 0.23 ppm e) 0.02 ppm f) 0.12 ppm g) 0.02 ppm h) 0.06 ppm wt.	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. 1979 Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90		

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 Cl)

Benzene, 1,1-(2,2-dichloroethylidene)bis(4-chloro- (9 Cl)

5C-29-3

C14-H9-Cl5

354-50, MF 108.5-109 C, BP 260 C, VP 1.5X10 (E-7) mm Hg at 20 C

Crocodile, American

CROCODILIUS ACUTUS

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
 50-29-3
 C14-89-Cl15
 MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10 (E-7) mm Hg at 20 C
 Gull, Great Llick-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
197 Eggs		GC	28	0.0-0.25 ppm wet wt	0.03 + or - 0.06 ppm wet wt	Batchfile index 1.7-2.11, shell thickness 0.38-0.47 mm, shell wt 7.21-9.09 g. Lipid content 6.0-9.6%. Collected 5/77.	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22: 394-399

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
 50-29-3
 C14-89-Cl15
 MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10 (E-7) mm Hg at 20 C
 Gull, Bering
LARUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
198 Eggs		GC	30	0.00-5.10 ppm wet wt	0.19 + or - 0.93 ppm wet wt	Batchfile index 1.53-1.98, shell thickness 0.38-0.47 mm, shell wt 5.07-7.49 g. Lipid content 6.10-10.20%. Collected 5/77.	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22: 394-399

Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
 50-29-3
 C14-89-Cl15
 MW 354.50, MP 108.5-109 C, BP 260 C, VP 1.5X10 (E-7) mm Hg at 20 C
 Porpoise, Harbor
FECOMA PHOCENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
199 Adipose	Placental	GC/MS	1	Not applicable	4.5 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% Value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23: 728-732

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Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(2,2,2-trichloroethylidene)bis(4-chloro- (9 CI)
 C14-H9-C15
 MW 354.50, MP 108.5-109 °C, BP 260 °C, VP 1.5X10 (E-7) mm Hg at 20 °C
 Porpoise, harbor
 FRCCOENA PHOCOENA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
200 Kidney	Placental	GC/MS	1	Not applicable	4.5 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% value for fetus (20 cm length of reached harbor porpoise in poor condition	Duinker, J.C. Billebaard, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
201 Liver	Placental	GC/MS	1	Not applicable	5.2 ug/g wet wt	In extractable lipids. Liver lipid content 21% value for fetus (length 20 cm) of reached harbor porpoise in poor condition	Duinker, J.C. Billebaard, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(dichloroethenylidene)bis(4-chloro- (9 CI)
 C14-H8-C14
 MW 318.02, MP 88-90 °C
 Crocodile, American
 CROCODILUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
202 Eggs		GC-EC	3	a) Not given b) Not given c) Not given d) 5 e) 1 f) 2 g) 3 h) 3	a) 1.0 ppm b) 1.5 ppm c) 0.68 ppm d) 1.5 ppm e) 0.37 ppm f) 2.9 ppm g) 0.37 ppm h) 0.99 ppm wet wt	8 clutches, significantly different IP < 0.05. shells, membranes removed. Mean shell thickness 0.49 mm	Hall, R.J. Kaiser, T.P. Robertson, W.B., Jr. Patty, C.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(dichloroethenylidene)bis(u-chloro- (9 CI)
 C14-BB-C14
 72-55-9
 MW 318.02 MP 88.4 C
 Fidder, common

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
203 Eggs	GC		30	0.00-0.43 ppm wet wt	0.23 + or - 0.13 ppm wet wt	Batcliffe Index 1.94-2.38, Shell thickness 0.37-0.5 mm, shell wt 7.44-9.9 g, lipid content 15.07-18.02%. Collected 5/77.	Szaro, R. C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(dichloroethenylidene)bis(u-chloro- (9 CI)
 C14-BB-C14
 MW 318.02 MP 88.4 C
 Gannet, Norwegian
 MORUS BASSANIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
204 Eggs	GC		a) 10 b) 11	a) 0.59-5.2 ppm b) 0.26-1.2 ppm wet wt	a) 2.1 + or - 1.5 ppm b) 0.66 + or - 0.27 ppm wet wt	a) 1912 b) 1978 Significant decrease in 6 yr period (F=0.01) No major industries in vicinity of gannetry. Norway, Nordjæle FIRDS; GANNETS; DDE; MERCURY; POLYCHLORINATED EPHENYLS; PCDDACCUMULATION; NORWAY; EGGS	Finnestad, N. Kveset, N. Brevik, Z.M. 1980 Bulletin of Environmental Contamination and Toxicology 24:142-144

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(dichloroethenylidene)bis(u-chloro- (9 CI)
 C14-BB-C14
 MW 318.02 MP 88.4 C
 Grabe, Western
 AEGAMPHORUS OCCIDENTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
205 Adipose	GC		18	5.4-213.0 ppm wet wt	61.5 ppm wet wt	Visceral fat in birds with sparse or no visceral fat Collected 1973-74.	Lindvall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22:754-760

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Ethylene, 1,1-dichloro-2-(*p*-chlorophenyl)- (8 CI)
 Benzene, 1,1-(dichloroethenyl)bis(*o*-chloro- (9 CI)
 72-55-9
 C14-BB-Cl4
 MW 318.02, MP 68-4 C
 Grebe, Western
ARCHIMEPHORUS OCCIDENTALIS

(CONTINUED)

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	Mean	General Information		Reference
206 Blood		GC	16	0.04-2.00 ppm wet wt	0.55 ppm wet wt	Higher levels in birds with sparse or no visceral fat Collected 1933-74.	Lindwall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22: 754-760	
						Birds; Eggs; Adipose Tissue; Blood; Muscles; Utan; Bioaccumulation; Pesticide Residues; DDD; DDE; PCPCHORONATED BIPHENYLS		
207 Eggs		GC	40	1.0-21.4 ppm wet wt (20-275 ppm lipid wt)	6.6 + or - 1.6 ppm wet wt (76.5 + or - 17.7 ppm lipid wt)	Average shell thickness index 1.898 + or - 0.015 mm. 2.3% decrease from Pre-DDT use Period Collected 1933-74.	Lindwall, M.L. Low, J.B. 1980 Pesticides Monitoring Journal 14(3): 108-111	
						Utah, Bear River Migratory Bird Refuge		
						No detectable effects on reproduction.		
						Eggs; Birds; Utah; CHLORINE ORGANIC COMPOUNDS; DDE; PCPCHORONATED BIPHENYLS; Bioaccumulation; Pesticide Residues		
208 Eggs			40	1.0-21.4 ppm wet wt (20-275 ppm lipid wt)	6.6 ppm wet wt (76.6 ppm lipid wt)	Hole eggs Collected 1933-74.	Lindwall, M. Low, J.B. 1979 Bulletin of Environmental Contamination and Toxicology 22: 754-760	
						Utah, Bear River Migratory Bird Refuge		
						Birds; Eggs; Adipose Tissue; Blood; Muscles; Utan; Bioaccumulation; Pesticide Residues; DDD; DDE; PCPCHORONATED BIPHENYLS		
209 Muscle		GC	24	<0.1-115.2 ppm wet wt (3-3287 ppm lipid wt)	12.8 ppm wet wt	Breast muscle Higher levels in birds with sparse or no visceral fat Collected 1933-74.	Lindwall, M. Low, J.P. 1979 Bulletin of Environmental Contamination and Toxicology 22: 754-760	
						Utah, Bear River Migratory Bird Refuge		
						Eggs; Adipose Tissue; Blood; Muscles; Utan; Bioaccumulation; Pesticide Residues; DDD; DDE; PCPCHORONATED BIPHENYLS		

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(dichloroethenylidene)bis(4-chloro- (9 CI)
 C19-88-C14
 72-53-9
 HS 318-02, MP 88-4 C
 Gull, great black-backed
 LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
210 Eggs	GC		28	4.0-27.00 PPM wet wt	8.66 + or - 4.67 PPM wet wt	Battaille index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77.	Szaro, R.C., Coon, N.C., Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22: 394-399

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
 Benzene, 1,1-(dichloroethenylidene)bis(4-chloro- (9 CI)
 C19-88-C14
 HS 318-02, MP 88-4 C
 Gull, herring
 TARSUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
211 Eggs	GC	a) 30 b) 28	a) 0.34-7.50 PPM b) 0.70-4.50 PPM Wet wt	a) 1.94 + or - 1.76 PPM b) 1.93 + or - 0.88 PPM Wet wt	a) Ratcliffe index 1.53-1.98, shell thickness 0.34-0.47 mm, shell wt 5.01-7.49 g, lipid content 6.10-10.20%. b) Ratcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.64 g, lipid content 6.2-9.7%. Collected 5/77.	BIRDS; EGGS; CHLORINE ORGANIC COMPOUNDS; DDE; DDT; Dieldrin; CHLOROBORANE; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES; VIRGINIA	Szaro, R.C., Coon, N.C., Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22: 394-399

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
benzene, 1,1-(dichloroethoxyidene)bis[4-chloro- (9 CI)
72-55-9
C14-18-C14

MP 318.02, MP 88.4 C

Furpoise, harbor
EPOCENA PHOCENA

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
212 Adipose	Placental	GC/MS	1	Not applicable	9.2 ug/g wet wt	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
				In extractable lipids. Subcutaneous fat lipid content 0.6% value for fetus (20 cm length) of beached harbor porpoise in poor condition		
213 Kidney	Placental	GC/MS	1	Not applicable	7.2 ug/g wet wt	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
				In extractable lipids. Kidney lipid content 1.5% value for fetus (length 20 cm) of beached harbor porpoise in poor condition		
214 Liver	Placental	GC/MS	1	Not applicable	11.8 ug/g wet wt	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
				In extractable lipids. Liver lipid content 2% value for fetus (length 20 cm) of beached harbor porpoise in poor condition		

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1-(dichloroethoxy)idenebis(4-chloro- (9 CI)
72-55-9
C14-88-C14
MW 318.02, MP 86.4 C

SNAKE, Garter
THAMNOPHIS SIRTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
215 Body, Whole	GC	6	0.22-0.78 ppm wet wt	0.47 ppm wet wt		Snout-vent length 646-752 mm, lipid content 3.2-9.0% nestling birds in stomachs of 3 snakes contained 0.42-0.45 ppm. Lake Michigan, Spider Island	Heinz, G.H. Baseltine, S.D. Hall, R.J. Kryntsy, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25: 738-743

Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)- (8 CI)
Benzene, 1,1-(dichloroethoxylidene)bis(4-chloro- (9 CI)
72-55-9
C14-88-C14
MW 318.02, MP 86.4 C

SNAKE, water
NERodia SIVEON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
216 Body, Whole	GC	1	Not applicable	1.6 ppm wet wt		Snout-vent length 855 mm, 6.2% lipid content Lake Michigan, Pilot Island	Heinz, G.H. Baseltine, S.D. Hall, R.J. Kryntsy, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25: 738-743

Fluorine
7782-41-4

F At 18.998%, MP -219.61 C, BP ~188.13 C, VP 100 mm Hg at -203 C
Deer, male
CROCOLIUS SPINOSUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
217 Bone	MAS	a) 12 b) 6	a) Not given b) Not given	a) < or = 0.3 ppm b) < or = 0.5 ppm dry wt		a) Adults (1.5 yr and older) b) Paws (0.5 yr) Betacarpus 1/79 near oil shale tracts before mining initiated.	Stettler, L.H. 1980 Journal of Wildlife Diseases 16(2): 175-182

Fluorine
7782-41-4

Atw 18.9084, MP -219.61 C, BP -188.13 C, VP 100 mm Hg at -203 C
Mouse, deer, FEROMYSCUS MINICULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
218 Bone	IVS	a) 45 b) 45 c) 45	a) 31-100 ppm b) 19-120 ppm c) 16-93 ppm DRY wt	a) 51.3 + or - 17.6 ppm b) 56.3 + or - 32.9 ppm c) 38.2 + or - 22.9 ppm Dry wt	a) Finyon-Juniper habitat b) Mountain shrub habitat c) Big Sagebrush habitat Captured/78 near oil shale tracts before mining initiated Whole skeleton.	Stetler, L.H. 1980 Journal of Veterinary Diseases 16(2):175-182	
						Colorado, Rio Blanco County, Piceance Creek Basin	

Iodine
7553-56-2
I
Atv 126.9045, MP 113.60 C, BP 185.24 C, VP (solid) 0.03 mm Hg at 0 C, 0.305 mm Hg at 25 C, 2.154 mm Hg at 50 C, 26.76 mm Hg at 90 C
Cattle
FCS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
219 Blood, serum	Ingestion		12	a) Not given b) Not given c) Not given	8.9 ug/100 ml 51.2 ug/100 ml 276.6 ug/100 ml	a) Control diet b) 50 mg ethylenediamine dihydriodide/day for 4 wk c) 400 mg ethylenediamine dihydriodide/day for 4 wk Yearling Holstein steers, mean age 17 mcs, mean wt 410 kg	Downer, J.V. Heukan, R.W. Fox, J.D. Bull, L.S. 1981 Journal of Animal Science 52(2):413-417
220 Liver	Ingestion		12	a) Not given b) Not given c) Not given	0.093 ug/g 0.121 ug/g 0.781 ug/g Net wt	a) Control diet b) 50 mg ethylenediamine dihydriodide/day for 4 wk c) 400 mg ethylenediamine dihydriodide/day for 4 wk Yearling Holstein steers, mean age 17 mcs, mean wt 410 kg	Downer, J.V. Heukan, R.W. Fox, J.D. Bull, L.S. 1981 Journal of Animal Science 52(2):413-417
221 Muscle	Ingestion		12	a) Not given b) Not given c) Not given	0.091 ug/g 0.127 ug/g 0.406 ug/g Net wt	a) Control diet b) 50 mg ethylenediamine dihydriodide/day for 4 wk c) 400 mg ethylenediamine dihydriodide/day for 4 wk Significantly higher levels in biceps brachii and trapezius than in semitendinosus, longissimus and rectus major Yearling Holstein steers, mean age 17 mcs, mean wt 410 kg	Downer, J.V. Heukan, R.W. Fox, J.D. Bull, L.S. 1981 Journal of Animal Science 52(2):413-417
						a) Control diet b) 50 mg ethylenediamine dihydriodide/day for 4 wk c) 400 mg ethylenediamine dihydriodide/day for 4 wk Significantly higher levels in biceps brachii and trapezius than in semitendinosus, longissimus and rectus major Yearling Holstein steers, mean age 17 mcs, mean wt 410 kg	CATTLE; BLOOD SERUM; LIVER; MUSCLES; THYROID GIANDS; KENTUCKY; IODINE; BIOACCUMULATION

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	REFERENCE
222 Thyroid gland	Ingestion		12	a) Not given b) Not given c) Not given Net wt	a) Control diet b) 50 ug ethylenediamine dihydriodide/day for 4 wk c) 400 ug ethylenediamine dihydriodide/day for 4 wk Yearling Holstein steers, mean age 17 mos., mean wt 410 kg CATTLE; BLOOD SERUM; LIVER; MUSCLES; THYROID GLAND; KENTUCKY; BIOACCUMULATION

IRON
7439-89-6
Fe
ACW 55-887, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C
Oyster
CHASSOISREA VIRGINICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
223 Body, whole				a) 24.8-69.8 ug/g b) 16.2-29.8 ug/g c) 14.7-137.4 ug/g d) 17.1-99.5 ug/g e) 11.5-90.1 ug/g f) 12.0-65.8 ug/g g) 10.4-20.5 ug/g h) Not given i) Not given j) Not given k) 27.7-170.6 ug/g l) Not given Dry wt	a) 49.2 + or - 18.7 b) 47.9 c) 22.4 + or - 6.8 d) 49.9 e) 48.2 + or - 28.8 f) 48.7 + or - 32.2 g) 48.7 + or - 22.8 h) 42.7 + or - 22.8 i) 41.3 + or - 26.9 j) 16.7 + or - 5.5 k) 20.8 + or - 0.6 l) 36.3 + or - 18.8 Dry wt	a) Wando River, south, 6 samples b) Wando River, mile 4, 4 samples c) Wando River, mile 8, 30 samples d) Wando River, mile 10, 7 samples e) Charleston Harbor, 8 samples f) North Santee Bay, 5 samples g) South Santee, 3 samples h) Fishing Creek, 2 samples i) Cape Point, 2 samples j) St. Helena Sound, 2 samples k) Ashley River, 4 samples l) Folly Bay, 2 samples Dry wt	a) Mathews, T.D. Boone, J.V. Davis, R.A. Simmons, D.R. 1979 Journal of Environmental Science and Health A1(8):683-694

IRCN
7439-89-6
Fe
ATH 55.847.
Swan, mute
CYGNUS OLOR

5-88-6

11

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DISCUSSION

ICN
7459-89-6
FE MP 55-897. MP 1535 C (pure). 1000-1300 C (cast). 1500 C (wrought), 1300 C (steel). BP 3000 C. VP 1 mm Hg at 1787 C. 10 mm Hg at 2040 C

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	General Information		Reference
						Hear	
224 Kidney	Ingestion	AAS	a) 17 b) 9	a) 470-2100 ug/g b) 940-1500 ug/g DRY wt	a) 1130 ug/g b) 1245 ug/g DRY wt	a) Poisoned swans b) Controls c) Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands.	SIMPSON, V.R. HUNT, A.E. 1979 Environmental Pollution 18:187-202
						United Kingdom, River Trent	
						Abnormal carriage of neck, anorexia, faeces, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss.	
						FINDS; SWANS; UNITED KINGDOM; LEAD; FECES; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	
225 Liver	Ingestion	AAS	a) 17 b) 9	a) 7000-23000 ug/g b) 1000-5300 ug/g DRY wt	a) 10480 ug/g b) 2425 ug/g DRY wt	a) Poisoned swans b) Controls c) Dead or dying birds in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands.	SIMPSON, V.R. HUNT, A.E. 1979 Environmental Pollution 18:187-202
						United Kingdom, River Trent	
						Abnormal carriage of neck, anorexia, faeces, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss.	
						FINDS; SWANS; UNITED KINGDOM; LEAD; FECES; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION	

Lead
7439-92-1
EL

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
226 Kidney		AAS	19	Not given	0.8 + or - 0.6 ug/g dry wt	Munshower, F. P. Neuman, D. R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Ex
Atw 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Antelope, Pendleton
ANTilocapra AMERICANA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
227 Liver		AAS	19	Not given	0.6 + or - 0.5 ug/g dry wt	Ages < 10-85 yr, assumed to be healthy. Accumulation with age (F=0.005). Vegetation analysis indicates pristine area free from gaseous pollution.	Munshower, P. F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832

Ex
Atw 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
EFFEBIUS FUSCUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
228 Body, whole		AAS	a) 8 b) 10	a) 20-90 ppm b) 20-56 ppm Net wt	a) 46.55 ppm b) 31.49 ppm Geometric means	a) Males b) Females Gastrointestinal tract and large embryos reared before analysis significantly higher levels in males. Trapped 5/76 in Montpelier Bar, 0.61 Km NW of Baltimore-Washington Parkway.	Clark, D.R., Jr. 1976 Environmental Science and Technology 13 (3): 338-341
229 Fetal		AAS		Not given	0.16 ppm wet wt	Average value for 9 litters 1.5-3 wk before completion of embryonic development. Mothers trapped 5/76 in Montpelier Bar, 0.61 Km NW of Baltimore-Washington Parkway.	Clark, D.R., Jr. 1979 Environmental Science and Technology 13 (3): 338-341

MARYLAND: ADULT; PATIS; BODY;

AUTOMOTIVE; AIR POLLUTION;

BIOACCUMULATION; LEAD

Lead
7439-92-1

Pb At 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Fat, little brown
MOTIS LUCIFUGUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
230 Body, whole	AAS	12	11-29 ppm wet wt	16.97 ppm wet wt geometric mean		Gastrintestinal tract and large eauneys removed before analysis Trapped 5/76 in Montpelier Barn, 0.6 km NW of Baltimore-Washington Parkway.	Clark, D.B., Jr. 1979 Environmental Science and Technology 13 (3) :338-341
						Maryland, Prince Georges County, Laurel	
231 Petal	AAS	Not given		2.38 ppm wet wt		VIRUS: MICE; SHREWS; RODENTS; BATS; BARNLND; ADULTS; PTERUS; BCDI; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	Clark, D.B., Jr. 1979 Environmental Science and Technology 13 (3) :338-341
						Maryland, Prince Georges County, Laurel	
						VIRUS: MICE; SHREWS; RODENTS; BATS; BARNLND; ADULTS; PTERUS; BCDI; AUTOMOTIVE; AIR POLLUTION; BIOACCUMULATION; LEAD	

Lead
7439-92-1
Pt
At 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Bluegill
LIECOTIS MACROCHIRUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
232 Body, whole	AAS	61	Not given	2.6 ug/g		Fishes, mean length 95 mm, mean dry wt 16.40 g, collected downstream of filled control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating.	Vinkour, W.S., Goldstein, R.H., Anderson, R.V., 1980 Bulletin of Environmental Containment and Toxicology 24:721-738
						ILLINOIS; ROD; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	

Pulled, black
ICLORUS HELAS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
233 Body, whole	AAS	10	Not given	1.1 ug/g		Fishes, mean length 172 mm, mean dry wt 41.59 g, collected downstream of fixed control weir at Argonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating.	Vinokur, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Lead
7439-92-1
Fb
ATH 207-2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
ICS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
234 Blood	Ingestion	AAS	20	a) 0.093-0.285 ppm b) < 0.03-0.084 ppm c) 0.086-0.284 ppm d) Not applicable	a) 0.221 ppm b) < 0.03 ppm c) 0.200 ppm d) < 0.03 ppm	a) Pastures fertilized with treated raffinate (100 lb N/Acre) or commercial fertilizer (100 lb N/Acre). Affixed 5/79 and 7/79 black, white-faced calves, mean Pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
235 Blood, whole	Ingestion	AAS	27	a) 0.2 ppm or less b) 0.3-0.4 ppm c) Not applicable d) 1	a) Not given b) 0.3 ppm c) 0.8 ppm d) Not applicable	No pathological changes CATTLE: RAPINATE; RADIN 226; TIGRIN 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA: BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Hamer, D.H. McCloskey, H.L. McCloskey, A.R. Auffenreide, W.M. 1980 Bovine Practice 15:49-50
						Faintness, incoordination, muscle twitching, excitement, prostration, coma. Edema of cerebral cortex, petechiae in the leptomeninges, fibrous adhesions of pleural surfaces, tympany.	CATTLE: JUVENILES; COLORADO; ADULTS; AUTOPSIES; LEAD POISONING; MUSCULAR DISEASES; BLOOD; KIDNEYS; LIVER; BIOACCUMULATION; LEAD ORGANIC COMPOUNDS

Lead
7439-92-1
Fb
AtW 207.2, MP 327.4 C, BP 1740 C, VP 1-77 mHg at 1000 C, 1 mHg at 970 C, 1 mHg at 950 C, 1 mHg at 930 C, 1 mHg at 1160 C
Cattle
ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	GENERAL INFORMATION		REFERENCE	
				RANGE	BRAIN		
236 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 5.0 + or - 0.2 ppm b) 7.2 + or - 0.6 ppm DRY WT	a) Control diet 12% high Cd sewage sludge. b) Diet of 12% high Cd sewage sludge. 106 days Significant increase ($P < .05$) in sludge-fed steers Hereford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE: SLUDGES: COLORADO: BONES; FATIN: KIDNEYS; LIVER; LINGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Barker, J.C. Spanier, E. Ward, G.M. 1981 Journal of Animal Science 52(1):109-114
237 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) 0.24 + or - 0.27 ppm DRY WT	a) Control diet 12% high Cd sewage sludge, b) Diet of 12% high Cd sewage sludge. 106 days Significant increase ($P < .01$) in sludge-fed steers Hereford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE: SLUDGES: COLORADO: BONES; FATIN: KIDNEYS; LIVER; LINGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholz, E.W. Barker, J.C. Spanier, E. Ward, G.M. 1981 Journal of Animal Science 52(1):109-114
238 Kidney			190	Not detected - 2.29 ppm wet wt	0.22 + or - 0.29 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales	Planjat, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
239 Kidney	Ingestion	AAS	1	a) Not applicable b) Not applicable	a) 60 ppm b) 240 ppm Wet wt	CATTLE: ABSIMIC: CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SELENIUM; ZINC; AUSTRALIA: KIDNEYS; LIVER a) Medulla b) Cortex Hereford calf fed sugar beet scraps from refinery which contained Pt acetate impregnated filter papers. Blindness, incoordination, muscle twitching, excitement, prostration, cca.	Haar, D.H. Gerrach, R.L. McCluskey, A.B. Aufferhause, W.M. 1980 Bovine Practice 1(5):49-50
						CATTLE: JUVENILES; COLORADO: ADULTS; AUTOPSY; LEAD POISONING; NEUROHUMORAL DISEASE; BLOOD; KIDNEYS; LIVER; BIOACCUMULATION; LEAD ORGANIC COMPOUNDS	

(NEXT PAGE)

lead
7439-92-1
Fb
AKW 207-2, MP 327-4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
EC5 sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN		
240 Kidney	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.95 + or - 0.09 ppm b) 10.8 + or - 0.9 ppm dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days significant increase ($P < .01$) in sludge-fed steers Hereford yearlings, mean wt. 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.Z. Kienholz, E.W. Batter, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1): 108-114
241 Kidney			a) 35 b) Not given	a) 0.4-6.8 mg/kg wet wt b) Not given	a) 1.20 mg/kg wet wt Medians	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from Previous Publication) 2 yr olds	Bunzl, K. Kracke, W. 1980 Food and Cosmetics Toxicology 18: 133-137
242 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.23 ppm b) 0.50 ppm wet wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). All fed 5/9 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5): 309-311
243 Liver					0.14 + or - 0.15 ppm wet wt	NC pathological changes CATTLE; RAFFINATE; RADIUM 226; TITANIUM 230; ARSENIC; CADMIUM; CEPHER; LEAD; MOLBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CATTLE; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Planjat, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30: 503-507
							Australia, New South Wales CATTLE; ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SILENTIUM; ZINC; AUSTRALIA; KIDNEYS; LIVER

(NEXT PAGE)

Lead
7139-92-1
Et
At 207.2, MF 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
EOS sp.

(CONTINUED)

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	General Information		Reference
					Mean	Range	
244 Liver	Ingestion	AAS	1	Not applicable	30 PPM wet wt	Berford calf fed sugar beet screenings from refinery which contained lead acetate impregnated filter papers. Blindness, incoordination, muscle twitching, excitement, prostration, coma.	Hazar, D.W. Gerlach, M.L. McKeeney, A.E. Auderheide, W.M. 1960 Bovine Practice 1(5):19-50
						Edema of cerebral cortex, petechiae in the leptoangitis, fibrinous adhesions of pleural surfaces, pneumonia.	
245 Liver	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.31 + or - 0.02 b) 4.33 + or - 0.53 Dry wt	CATTLE; JUVENILES; COLORADO; ADULTS; AUTOPSES; LEAD POISONING; NEUROMUSCULAR DISEASES; BLOOD; KIDNEYS; LIVER; BIOACCUMULATION; LEAD ORGANIC COMPOUNDS	Johnson, D.E. Kienholz, E.W. Baxter, J.C. Spangler, E. Ward, G.H. 1981 Journal of Animal Science 52(1):108-114
						Control diet a) Diet of 12% high Cd sewage sludge, 106 days b) Significant increase ($P < .01$) in sludge-fed steers Berford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	
246 Liver	Ingestion	AAS	a) 35 b) Not given	a) 0.2-6.2 mg/kg wet wt b) Not given	a) 0.58 mg/kg b) 0.12 mg/kg Median	CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Bunzel, K. Kracke, R. 1980 Food and Cosmetics Toxicology 18: 133-137
						a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from previous publication) 2 yr olds	
						Germany, Erfel area	
						CATTLE; LEAD 210; POLONIUM 210; GERMANY; KIDNEYS; LIVER; COMPARATIVE EVALUATIONS; LEAD; BIOACCUMULATION; MINING; RADIONUCLIDES	
247 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.065 ppm b) 0.58 ppm Wet wt	No pathological changes	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

(NEXT PAGE)

Lead
7429-92-1
Ft AtW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Cattle
ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
248 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.10 + or - 0.03 b) 0.23 + or - 0.05 ppm dry wt	b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E., Kienholz, E.W., Batter, J.C., Spangler, E., Ward, G.H., 1981 CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY Journal of Animal Science 52(1):108-114
249 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) < 0.01 ppm dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Hereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E., Kienholz, E.W., Batter, J.C., Spangler, E., Ward, G.H., 1981 CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY Journal of Animal Science 52(1):108-114
250 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) < 0.02 ppm b) 0.12 ppm wt vt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (1000 lb N/acre) or commercial fertilizer (100 lb /acre). AF filled 5/9 and 7/9 black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, R.C., Dooley, A.L., 1990 Veterinary and Human Toxicology 22(5):309-311
251 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 0.21 + or - 0.01 b) 3.77 + or - 1.1 ppm dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge, 106 days Significant increase ($P < .05$) in sludge-fed steers Slaughtered at 460 kg mean live wt.	Johnson, D.E., Kienholz, E.W., Batter, J.C., Spangler, E., Ward, G.H., 1981 CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY Journal of Animal Science 52(1):108-114

Lead

7419-92-1

FE
ATW 207.2, MP 327.4 C, VP 1740 C, 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Crappie, black
FUCHSIS MIGRORACULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
252 Body, whole	AAS	Not given	26	1.3 ug/g	Fishes, mean length 109 mm, mean dry wt 18.9 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. Metal concentration change with increasing fish wt.	Vinour, W.S., Goldstein, R.M., Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24: 727-734	

Lead
7419-92-1
FE
ATW 207.2, MP 327.4 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
deer, male
CHOCOILURUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
253 Kidney	AAS	Not given	21	0.7 + or - 0.4 ug/g dry wt	Ages < 10-85 mo, assumed to be healthy. Vegetation analysis indicates Pristine area free from gross pollution.	Munshower, P.F., Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832	
254 Liver	AAS	Not given	27	0.9 + or - 0.7 ug/g dry wt	Montana, Northern Great Plains LIVER; ANTOLODE; MORTAHA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, P.F., Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832	

Lead
7439-92-1
ATW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Fish

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
255 Kidney	AAS		17	0-10-0.42 ug/g wet wt	0.19 ug/g wet wt	Composite samples of MUGILIDAE, COPILIDAE, MULLIDAE, SPINIDAE, SCOMBRIDAE, TRIGLIDE, PLEuronectidae, ANGUILIDAE, and GEPIDIIDAE (marketed as "mixed fried fish") Maximum length 10 cm	Buggiani, S.S. Vannuchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25: 90-92
256 Liver	AAS		17	0-10-0.41 ug/g wet wt	0.18 ug/g wet wt	Composite samples of MUGILIDAE, COPILIDAE, MULLIDAE, SPINIDAE, SCOMBRIDAE, TRIGLIDE, PLEuronectidae, ANGUILIDAE, and GEPIDIIDAE (marketed as "mixed fried fish") Maximum length 10 cm	Buggiani, S.S. Vannuchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25: 90-92
257 Muscle	AAS		15	0-10-0.52 ug/g wet wt	0.23 ug/g wet wt	Composite samples of MUGILIDAE, COPILIDAE, MULLIDAE, SPINIDAE, SCOMBRIDAE, TRIGLIDE, PLEuronectidae, ANGUILIDAE, and GEPIDIIDAE (marketed as "mixed fried fish") Maximum length 10 cm	Buggiani, S.S. Vannuchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25: 90-92
						ITAL: MERCURI; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	
						ITAL: MERCURI; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	
						ITAL: MERCURI; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY	

Lead
7439-92-1
Hg
ATW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Grouse, ruffed
ECNASSA USSELIIUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
258 Feathers	AAS		130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 7.5 + or - 2.7 b) 4.8 + or - 2.7 c) 88 males d) 42 females ⁵ e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest g) 1.5 + or - 0.5 h) 5.2 + or - 2.3 i) 8.3 + or - 3.5 j) dry wt	a) 77 adults b) 53 juveniles c) 88 males d) 42 females ⁵ e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest g) 1.5 + or - 0.5 h) 5.2 + or - 2.3 i) 8.3 + or - 3.5 j) dry wt	Scanlon, P.P. Oderwald, R.G. Districk, T.J. Cosgrove, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25: 947-949
						LIRDS; FEATHERS; JUVENILES; CADMIUM; COPPER; LEAD; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS	
						Virginia (SW)	

Lead
7439-92-1

Fr
ATW 201.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Mouse, white-footed
PEROMYSCUS LIEUCOPUS

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
259 Body, whole	AAS	a) 5 b) 14 Wet wt	a) 0.32-13 ppm b) 0.36-41 ppm	a) 1.16 ppm b) 4.91 ppm Geometric means	a) Montpelier Barn, 0.61 Km NW of Baltimore-Washington Parkway b) Baltimore-Washington Parkway Gastrointestinal tract and large embryos removed before analysis Trapped 5-6/76. Maryland, Prince Georges County, Laurel	Clark, D.B., Jr. 1979 Environmental Science and Technology 13 (3):338-341
260 Fetal			Not given	0.11 ppm wet wt	Litter frms mother trapped near Baltimore-Washington Parkway 5-6/76. Maryland, Prince Georges County, Laurel	Clark, D.B., Jr. 1979 Environmental Science and Technology 13 (3):338-341

Lead
7439-92-1

Fr
ATW 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Perch, yellow
FIRCA FLAVIFENS

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
261 Body, whole	AAS	40	Not given	2.2 ug/g	Fishes, mean length 104 mm, mean dry wt 11.22 g, collected downstream of flood control weir at Algonquin. No major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt.	Vinikour, W.S., Goldstein, R.M., Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Illinois, Fox River

ILLINOIS; BODY; BIOACCUMULATION;
FISHES; WATER POLLUTION; CADMIUM;
COPPER; LEAD; METALS; ZINC

Sirex, short-tailed
ELARINA BRVICAUDA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
262 Body, whole	Ingestion	AAS	a) 4 b) 6	a) 0.23-8.0 ppm b) 6.2-13.0 ppm wt	a) 1.85 ppm b) 26.20 ppm wt Geometric means	a) Montpelier Barn, 0.61 km NW of Baltimore-Washington Parkway b) Baltimore-Washington Parkway deserted tidal flat tract and large embryos removed before analysis. Trapped 5-6/76.	Clark, D.B., Jr. 1979 Environmental Science and Technology 13 (3):338-341

lead-7-39-92-1
Et
Act 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 CSparrow,
CINclus Olor

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
263 Adrenal gland	Ingestion	AAS	2	16-29 ug/g dry wt	23 ug/g dry wt	Poisoned swans, dead or dying, in heavily fished area, central Nottingham. Average gizzard content, 11 fishing shots/bird.	Simpson, V.R. Hunt, A.Z. 1979 Environmental Pollution 18:187-202
264 Blood	Ingestion	AAS	a) 25 b) 29	a) Not detected-3290 ug/100 ml b) 3-132 ug/100 ml	a) 375 ug/100 ml b) 21.9 ug/100 ml	FLEDS; SWANS: UNITED KINGDOM; LEAD POISONING; EGGS; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION a) Affected herd in heavily fished area, Nottingham b) Normal herd, Burton-on-Trent	United Kingdom, River Trent Simpson, V.R. Hunt, A.Z. 1979 Environmental Pollution 18:187-202
						Changes in erythrocytes, reduction of cell volume and hemoglobin concentration.	

(NEXT PAGE)

Lead
7439-92-1
Pb Act 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Swan, mute
CIGNUS OOLOR

(CONTINUED)

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	General Information		Reference
					Mean	N.M.	
265 Bone	Ingestion	AMS	a) 4 b) 2	a) 212-1255 ug/g Dry wt b) 21-41 ug/g	a) 762 ug/g Dry wt b) 32 ug/g	-	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
							United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and Proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss.
266 Brain	Ingestion	AMS	a) 5 b) 1	a) 26-150 ug/g Dry wt b) Not given	a) 65 ug/g b) 59 ug/g	-	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
							United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and Proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss.
267 Kidney	Ingestion	AMS	a) 18 b) 16	a) 350-6550 ug/g Dry wt b) 1-77 ug/g Dry wt	a) 1734 ug/g Dry wt b) 16 ug/g Dry wt	-	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18:187-202
							United Kingdom, River Trent Abnormal carriage of neck, anorexia, paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and Proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss.

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Tissue	Exposure Route	Analytical Method	Number of Cases	Range	Mean	General Information			Reference
268 Liver	Ingestion	AAS	a) 18 b) 11	a) 51-206 ug/g b) 1-11 ug/g DRY wt	a) 117 ug/g b) 3.5 ug/g DRY wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, Central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes. East Midlands.	b) Controls Dead or dying birds in heavily fished area, Central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes. East Midlands.	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 16:187-202	
269 Spleen	Ingestion	AAS	a) 12 b) 8	a) 27-117 ug/g b) 5-11 ug/g DRY wt	a) 67 ug/g b) 8.7 ug/g DRY wt	a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, Central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, Past Midlands.	b) Controls Dead or dying birds in heavily fished area, Central Nottingham. Average gizzard content, 11 fishing shots/bird. Controls, dead from other causes, Past Midlands.	Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 16:187-202	

Lead
Pt.
At 207.2, MP 327.4 C, VP 1740 C, 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C

Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
270 Blood	Ingestion		1	Not applicable	0.025 ppm wet wt	FROM group of growing Yorkshire crossbreds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO ₄ as growth prostant. Estimated death losses, 400 of 2000 pigs during 10.5 mo.	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, A.V. Smalley, R.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619
271 Kidney	Ingestion		2	0.5-5.0 ppm wet wt	2.8 ppm wet wt	FROM group of growing Yorkshire crossbreds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO ₄ as growth prostant. Estimated death losses, 400 of 2000 pigs during 10.5 mo.	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, A.V. Smalley, R.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619
272 Liver	Ingestion		1	Not applicable	0.5 ppm wet wt	FROM group of growing Yorkshire crossbreds (wt 35-55 kg) fed improperly compounded feed containing 700 ppm CuSO ₄ as growth prostant. Estimated death losses, 400 of 2000 pigs during 10.5 mo.	Hatch, R.C. Blue, J.L. Mahaffey, E.A. Jain, A.V. Smalley, R.E. 1979 Journal of the American Veterinary Medical Association 174(6):616-619

Ft Atw 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Vcle, *Meadowlark*
PICOROUS PENNSYLVANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
273 Body, whole	AAS	a) 6 b) 20	a) 0.46-1.4 ppm b) 0.22-5.0 ppm Wet wt	a) 0.84 ppm b) 1.05 ppm Net wt	Geometric means	a) Montpelier Barn, 0.61 km NW of Baltimore-Washington Parkway b) Baltimore-Washington Parkway Gastrointestinal tract and large embryos removed before analysis trapped 5-6/76.	Clark, D.R., Jr. 1979 Environmental Science and Technology 13 (3):338-341
						Maryland, Prince Georges County, Laurel	

Lead
7439-92-1
Ft Atw 207.2, MP 327.4 C, BP 1740 C, VP 1.77 mm Hg at 1000 C, 1 mm Hg at 970 C, 10 mm Hg at 1160 C
Vulture, King
SARCOPHAGA PAPA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
275 Kidney	Ingestion	AAS	a) 1 b) 1	a) Not given b) Not given	a) 70.6 ppm b) 24.6 ppm Net wt	a) Had 13 lead shot in stomach b) Had 3 lead shot in stomach Adult birds at a zoo. Ataxia, anorexia.	Decker, R.A. McDermid, A.M. Prideaux, J.H. 1979 Journal of the American Veterinary Medical Association 175:1009
						Listened gall bladder, biliary pigment in hemosiderosis, biliary epithelium of tubular epithelium of kidneys.	
276 Liver	Ingestion	AAS	a) 1 b) 1	a) Not given b) Not given	a) 62.8 ppm b) 6.8 ppm Net wt	a) Had 13 lead shot in stomach b) Had 3 lead shot in stomach Adult birds at a zoo. Ataxia, anorexia.	Decker, R.A. McDermid, A.M. Prideaux, J.H. 1979 Journal of the American Veterinary Medical Association 175:1009
						Listened gall bladder, biliary pigment in tubular epithelium of kidneys.	

Lead, Isotope of Mass 210
18255-04-0
Et
MN 210
Cattle
ECS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
277 Kidney			a) 35 b) Not given	a) 8.4-42 pCi/kg wet wt b) Not given Net wt Medians	a) 19.5 pCi/kg b) 44.0 pCi/kg Net wt Medians	a) Cattle grazing near abandoned Pb mine, Kracke, W. b) Controls from non-industrial, low-traffic area (data from previous publications) Significantly lower values in animals near lead mine 2 yr olds	Bunzl, R. Kracke, W. 1980 Food and Cosmetics Toxicology 18: 133-137
278 Liver			a) 35 b) Not given	a) 4.0-67.5 pCi/kg wet wt b) Not given	a) 12.9 pCi/kg b) 18.0 pCi/kg Net wt Medians	a) Cattle grazing near abandoned Pb mine, Kracke, W. b) Controls from non-industrial, low-traffic area (data from previous publication) Significantly lower values in animals near lead mine 2 yr olds	Bunzl, R. Kracke, W. 1980 Food and Cosmetics Toxicology 18: 133-137

Manganese
7439-96-5
Mn
AW 54.9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Antelope, pronghorn
ANTilocapra americana

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
279 Kidney		AAS	21	Not given	6.0 + or - 1.4 ug/g dry wt	Ages < 10-85 yo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, P.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832
280 Liver		AAS	20	Not given	7.3 + or - 3.2 ug/g dry wt	Ages < 10-85 yo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, P.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832

Manganese
7439-96-5
Bn
ATW 54, 9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Cattle
ECS spp.

Manganese
7439-96-5
Bn
ATW 54, 9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Cattle
ECS spp.

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	Mean	General Information		Reference
281 Kidney		AAS	190	0.56-1.67 ppm wet wt	1.07 + or - 0.22 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region.		Planjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
282 Liver		AAS	190	1.11-4.09 ppm wet wt	2.72 + or - 0.55 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region.		Planjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

Manganese
7439-96-5
Bn
ATW 54, 9380, MP 1244 C, BP 2095 C, VP 1 mm Hg at 1292 C, 10 mm Hg at 1510 C
Feer, male
CROCODILUS BREVIGUSS

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	Mean	General Information		Reference
283 Kidney		AAS	23	Not given	8.2 + or - 2.2 ug/g dry wt	Ages < 10-65 No animals assumed to be healthy. Vegetation analysis indicates pristine area free from gross pollution.		Munshower, P.F. Neman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
284 Liver		AAS	29	Not given	9.4 + or - 2.5 ug/g dry wt	Ages < 10-65 No. assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.		Munshower, P.F. Neman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Mercury
7439-97-6
B9
At 200-59, MP -38-87 C, BP 356-72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Fass, largemouth
MICROPTERUS SALOIDES

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
285 Muscle	AAS	a) b) c)	3 11 4	a) 0.14-0.31 ppb b) 0.11-0.81 ppb c) 0.49-1.20 ppb	a) 0.27 ppb b) 0.19 ppb c) 0.67 ppb	a) Length 15-25 cm b) Length 25-35 cm c) Length 35-60 cm Reservoir constructed in early '70's. Primary source is natural soil Hg. Affected decrease in soil levels *within 5 yr. Illinois (Sh, Jackson and Union Counties, Cedar Lake Reservoir MUSCLES: ILLINOIS; MERCURY; MERCURY ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION	Cox, J.A. Carnahan, J. DiNunzio, J. McCoy, J. Heister, J. 1979 Bulletin of Environmental Contamination and Toxicology 23: 779-783

Mercury
7439-97-6
B9
At 200-59, MP -38-87 C, BP 356-72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Beaver
CASTOR CANADENSIS

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
286 Intestine	AAS	4	Not given	31 + or - 3 ppb	Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area.	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25: 100-105	
287 Kidney	AAS	4	Not given	33 + or - 5 ppb	Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area.	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25: 100-105	
288 Liver	AAS	4	Not given	32 + or - 8 ppb	Wt 9.96 + or - 2.06 kg (pelt not included) No direct sources of contamination in trapping area.	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25: 100-105	

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MERCURY
7439-97-6
B9
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Eeaver
CASTOR CANADENSIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
289 Muscle	AAS	4	Not given	32 + or - 6 ppb	47.96 + or - 2.06 kg (pelts not included) inc direct sources of contamination in trapping areas	Wren, C. MacClellan, H. Frank, R. Suda, F. 1980	Canada, Precambrian Shield, Ontario Nuskoka District

FIEVERS; RACCOONS; OTTERS; CANADA;
LIVERSTONES; KIDNEYS; LIVER; MUSCLES;
BIOACCUMULATION; MERCURY; MERCURY
ORGANIC COMPOUNDS

Mercury
7439-97-6
B9
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Eneagill
LIFCMIS MICROCHIRUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
290 Muscle	AAS	1	Not given	<0.2 ppm	Reservoir constructed in early '70's. Primary source is natural soil Hg. Expected decrease in soil levels within 5 yr.	Cox, J.A. Carrahan, J. DiRuzio, J. McCoy, J. Meister, J. 1979	Illinois (SI), Jackson and Union Counties, Cedar Lake Reservoir MUSCLES; ILLINOIS; MERCURY; MERCURY ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION

Mercury
7439-97-6
B9
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Ecoby, Peruvian
SELA VAREGATA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
291 Feathers		8	Not given	0.72 + or - 0.35 ug/g dry wt	Eeast feathers live or dead birds collected on rooftops near Lima, 1972	Gochfeld, M. 1980 Environmental Pollution 22: 197-205	Humboldt Current, Peru FIELDS; PLATINAS; PERU; BIOACCUMULATION; WATER POLLUTION; MERCURY

Mercury
7439-97-6
B9
ATW 200-59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cattle
ECS sp.

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	General Information		Reference
					Mean	SD	
292 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.013 ppm b) < 0.01 ppm Dry wt		Johnson, D.E. Kianholz, E.H. Batter, J.C. Spangler, E. Ward, G.M. 1981 CATTLE; SLUDGES; COLORADO; BONES; FEARIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY
293 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) < 0.01 ppm b) < 0.01 ppm Dry wt		Johnson, D.E. Kianholz, E.H. Batter, J.C. Spangler, E. Ward, G.M. 1981 CATTLE; SLUDGES; COLORADO; BONES; FEARIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY
294 Kidney			190	Not detected-0.177 ppm wet wt	0.006 + or - 0.016 ppm wet wt		Planjak, J. Lee, H.Y. 1975 samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales
295 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 0.09 + or - 0.01 ppm b) 2.04 + or - 0.16 ppm Dry wt		Johnson, D.E. Kianholz, E.H. Batter, J.C. Spangler, E. Ward, G.M. 1981 CATTLE; SLUDGES; COLORADO; BONES; FEARIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY
296 Liver			190	< 0.004-0.050 ppm wet wt	0.005 + or - 0.005 ppm wet wt		Planjak, J. Lee, H.Y. 1975 samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales

Mercury
7439-97-6
Hg
atw 200-59, bp -38-87 C, vp 356-72 C, vp 2x10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cattle
BCS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE
						a)	b)	
297 Liver	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given		a) < 0.01 ppm b) 0.27 + or - 0.3 ppm Dry wt	a) Control diet of 12% high Cd sewage sludge, 106 days significant increase ($P < .01$) in sludge-fed steers Bereford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE: SLUDGES; COLORADO; BONES; FEIN; KIDNEYS; LIVER; LONGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E., Kienholz, E.W., Barker, J.C., Spanier, E., Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
298 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given		a) < 0.01 ppm b) 0.05 + or - 0.01 ppm Dry wt	a) Control diet of 12% high Cd sewage sludge, 106 days significant increase ($P < .01$) in sludge-fed steers Bereford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE: SLUDGES; COLORADO; BONES; FEIN; KIDNEYS; LIVER; LONGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E., Kienholz, E.W., Barker, J.C., Spanier, E., Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
299 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given		a) < 0.01 ppm b) 0.02 + or - 0.003 ppm Dry wt	a) Control diet of 12% high Cd sewage sludge, 106 days significant increase ($P < .05$) in sludge-fed steers Bereford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE: SLUDGES; COLORADO; BONES; FEIN; KIDNEYS; LIVER; LONGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E., Kienholz, E.W., Barker, J.C., Spanier, E., Ward, G.M. 1981 Journal of Animal Science 52(1):108-114
300 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given		a) < 0.01 ppm b) 0.08 + or - 0.02 ppm Dry wt	a) Control diet of 12% high Cd sewage sludge, 106 days significant increase ($P < .05$) in sludge-fed steers Bereford Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE: SLUDGES; COLORADO; BONES; FEIN; KIDNEYS; LIVER; LONGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E., Kienholz, E.W., Barker, J.C., Spanier, E., Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

Mercury
7439-97-6
Hg
At 200.59, MP -38.87 C, BP 356.72 C, VP 2X10 (E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Chicken

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
301 Eggs	Ingestion	GC	2	a) Not applicable b) 2600-4500 ng/g	a) 310 ng/g b) 3550 ng/g	a) White, 5% of total Hg b) York, 87.2% of total Hg Total levels 10-10000 higher than in market eggs Flocks domestic chickens accidentally fed fungicide-contaminated grain.	Cannon, C.J. Smith, J.C. 1981a Bulletin of Environmental Contamination and Toxicology 26:472-478

Mercury
7439-97-6
Hg
At 200.59, MP -38.87 C, BP 356.72 C, VP 2X10 (E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Corcovado, Guanay
PHALACROCORAX BOUGAINVILLII

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
302 Feathers			4	Not given	0.43 + or - 0.10 ug/g dry wt	Breast feathers live or dead birds collected on beaches near Lima, 1972 Burboldt Current, Peru	Gochfeld, M. 1980 Environmental Pollution 22:197-205

Mercury
7439-97-6
Hg
At 200.59, MP -38.87 C, BP 356.72 C, VP 2X10 (E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cormorant, red-legged
PHALACROCORAX GALLARDII

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
303 Feathers			2	Not given	1.04 + or - 0.65 ug/g dry wt	Breast feathers live or dead birds collected on beaches near Lima, 1972 Burboldt Current, Peru	Gochfeld, M. 1980 Environmental Pollution 22:197-205

Mercury

7439-97-6

B9
Atw 200-59, MP -38-87 C, BP 356-72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Cripple
ECHOES ANNULARIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
304 Muscle	AAS		15	Not given	0.59 ppm	Reservoir constructed in early 1970's. Primary source is natural soil Hg. Expected decrease in soil levels within 5 yr.	Cox, J.A., Carnahan, J., DiNunzio, J., McCoy, J., Neister, J., 1979 Illinois (S), Jackson and Union Counties, Cedar Lake Reservoir Environmental Containment and Toxicology 23:779-783

Mercury

7439-97-6

B9
Atw 200-59, MP -38-87 C, BP 356-72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Deer, Whitetail

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
305 Heart	GC		1	Not applicable	60.5 ppb wet wt (56.3% of total Hg)	Feral area. No known contamination	Cappon, C.J., Smith, J.C., 1981b New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SILENTUM
306 Liver	GC		1	Not applicable	86.4 ppb wet wt (66.4% of total Hg)	Feral area. No known contamination	Cappon, C.J., Smith, J.C., 1981b New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SILENTUM
307 Muscle	GC		1	Not applicable	72.2 ppb wet wt (79.4% of total Hg)	Feral area. No known contamination	Cappon, C.J., Smith, J.C., 1981b New York State (W) DEER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SILENTUM

Mercury
7439-91-6
Hg
ATW 200-59, MP -38-87 C, BP 356-72 C, VP 2210(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Fish

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	GENERAL INFORMATION		REFERENCE
				RANGE	MEAN	
308 Kidney		AAS	17	0.01-5.43 ug/g wet wt	0.76 ug/g wet wt	Buggiani, S.S. Vannuccci, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92
				Composite samples of MUGILIDAE, CUPIDIDAE, MULLIDAE, SPATIDIAD, SCOMBRIDAE, TRIGLIDAE, and FICHTENOGTIDE; ANGUILIDAE, and GOBLIDAE (marketed as "mixed fried fish") Maximum length 10 cm		
				Italy, Tuscan coasts		
309 Liver		AAS	17	0.01-1.21 ug/g wet wt	0.41 ug/g wet wt	Buggiani, S.S. Vannuccci, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92
				Composite samples of MUGILIDAE, CUPIDIDAE, MULLIDAE, SPATIDIAD, SCOMBRIDAE, TRIGLIDAE, FICHTENOGTIDE, ANGUILIDAE, and GOBLIDAE (marketed as "mixed fried fish") Maximum length 10 cm		
				Italy, Tuscan coasts		
				IRAN: MERCURY; BIOACCUMULATION; FISHES; WATER POLLUTION; KIDNEYS; LIVER; MUSCLES; ITALY		
310 Muscle		AAS	10	0.07-0.56 mg/kg	0.17 mg/kg	Parvaneh, V. 1979 Bulletin of Environmental Contamination and Toxicology 23:357-359
				Fadous samples. Acceptable limit in scst countries = 0.5 mg/kg		
				Persian Gulf		
311 Muscle		AAS	8	0.08-0.20 mg/kg	0.14 mg/kg	IRAN: MUSCLES; FISHES; WATER EXCLUSION; MERCURY
				Persian Gulf samples. Acceptable limit in scst countries = 0.5 mg/kg		
				Persian Gulf		
312 Muscle		AAS	8	0.08-0.48 mg/kg	0.19 mg/kg	IRAN: MUSCLES; FISHES; WATER EXCLUSION; MERCURY
				Persian Gulf samples. Acceptable limit in scst countries = 0.5 mg/kg		
313 Muscle		AAS	5	0.04-0.30 mg/kg	0.15 mg/kg	Parvaneh, V. 1979 Bulletin of Environmental Contamination and Toxicology 23:357-359
				Persian Gulf		
				IRAN: MUSCLES; FISHES; WATER EXCLUSION; MERCURY		

(NEXT PAGE)

Mercury
7439-97-6
Bq
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) ug at 25 C, 100 ug at 260 C
Fish

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
319 Muscle	AAS		15	0.01-0.70 ug/g wet wt	0.30 ug/g wet wt	Composite samples of MUGILIDAE, COPIIDAE, BULLIDAE, SPURIDAE, SCOMBERIDAE, TRIGLIDAE, PTEROPODCTIDAE, ANGUILIDAE, and GOBIIDAE (marketed as "mixed fried fish") Maxim length 10 cm Italy, Tuscan coasts	Buggiani, S.S. Vannucchi, C. 1980 Bulletin of Environmental Contamination and Toxicology 25:90-92

Mercury
7439-97-6
Bq
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) ug at 25 C, 100 ug at 260 C
Cannet, Norwegian
BCRUS BASSANUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
315 Eggs	AAS		a) 10 b) 11	a) 0.05-0.80 ppm b) 0.66-0.94 ppm Net wt	a) 0.58 + or - 0.12 b) 0.80 + or - 0.09 ppm Net wt	a) 1972, mainly as methyl-Hg b) 1978 No major industries in vicinity of gannetry. Norway, Nordlande	Fjærseth, N. Kvæstø, N. Brovik, E.M. 1980 Bulletin of Environmental Contamination and Toxicology 24:142-144

Mercury
7439-97-6
Bq
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) ug at 25 C, 100 ug at 260 C
Mink
HUSLEA VISION

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
316 Muscle	Ingestion	NA	a) 12 b) 11	a) Not given b) Not given	a) 210 + or - 15 mg/g b) 250 + or - 20 mg/g	a) controls on standard feed containing 0.05 ppm PCB b) animals fed daily doses of 3300 ug (11 ppm), PCE for 66 days animals killed 1 yr after fortification, age 1 yr MINK: CADMIUM; MERCURY; POLYCHLORINATED DIPHENYLS; SWEDEN: ADIPOSE TISSUE; KIDNEYS; MUSCLES; BIOACCUMULATION	Cisson, H. Kihlstrom, J.E. Jensen, S. Orberg, J. 1979 Ambio 8(1): 25

Mercury
7439-97-6
Pb
MP -38.87 C, BP 356.72 C, VP 2X10⁽³⁻³⁾ mm Hg at 25 C, 100 mm Hg at 260 C
Int 200.59, MP -38.87 C, BP 356.72 C, VP 2X10⁽³⁻³⁾ mm Hg at 25 C, 100 mm Hg at 260 C
Otter
ICTHA CANADENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION			REFERENCE
317 Intestine	AAS	4	Not given	419 + or - 158 ppb	419 + or - 1.81 kg (pelts not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980	Bulletin of Environmental Contamination and Toxicology 25:100-105		
						Canada, PreCambrian Shield, Ontario Musika District			
						FEATHERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS			
318 Kidney	AAS	4	Not given	1046 + or - 276 ppb	1046 + or - 1.81 kg (pelts not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980	Bulletin of Environmental Contamination and Toxicology 25:100-105		
						Canada, PreCambrian Shield, Ontario Musika District			
						FEATHERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS			
319 Liver	AAS	4	Not given	2973 + or - 2230 ppb	2973 + or - 1.81 kg (pelts not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980	Bulletin of Environmental Contamination and Toxicology 25:100-105		
						Canada, PreCambrian Shield, Ontario Musika District			
						FEATHERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS			
320 Muscle	AAS	4	Not given	889 + or - 217 ppb	889 + or - 1.81 kg (pelts not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980	Bulletin of Environmental Contamination and Toxicology 25:100-105		
						Canada, PreCambrian Shield, Ontario Musika District			
						FEATHERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS			

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
321 Muscle	AAS	a) 19 b) 18	a) 0.01-0.03 mg/kg b) 0.17-1.38 mg/kg Net wt	a) 0.02 mg/kg b) 0.62 mg/kg Net wt	a) Lake Dufault, Length 52.0-81.5 cm, wt 75-250 g. Levels not related to size b) Lake Duparquet. Length 40.0-81.5 cm, wt 21-359 g. Levels directly related to size collected summer '77.	Speyer, M.R. 1980 Bull. Environ. Contam. Toxicol. 24:427-432	

Hg at 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

Hg at 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Raccoon
PROSCIUTTO

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
322 Kidney	AAS	4	Not given	1113 + or - 308 ppb	Wt 50 + or - 0.86 kg (pelts not included)	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bull. Environ. Contam. Toxicol. 25:100-105	
323 Liver	AAS	4	Not given	4528 + or - 3388 ppb	Wt 50 + or - 0.86 kg (pelts not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bull. Environ. Contam. Toxicol. 25:100-105	
324 Muscle	AAS	4	Not given	278 + or - 73 ppb	Wt 50 + or - 0.86 kg (pelts not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bull. Environ. Contam. Toxicol. 25:100-105	

FEATHERS; RACCOONS; OTTERS; CANADA;
INTESTINES; KIDNEYS; LIVER; MUSCLES;
BIOACCUMULATION; MERCURY; MERCURY
ORGANIC COMPOUNDSFEATHERS; RACCOONS; OTTERS; CANADA;
INTESTINES; KIDNEYS; LIVER; MUSCLES;
BIOACCUMULATION; MERCURY; MERCURY
ORGANIC COMPOUNDS

MERCURY
7439-97-6
Hg 200.59, 5:90-98 MP -38.87 C, BP 356.72 C, VP 2X10^(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Seal

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
325 Liver	GC	1	Not applicable	4777.0 ppb wet wt	90.9% of total Hg	Canada, Quebec (N), Inuit Eskimo Community	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
326 Muscle	GC	1	Not applicable	425.7 ppb wet wt	37.1% cf total Hg	Canada, Quebec (N), Inuit Eskimo Community	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

MERCURY
7439-97-6
Hg 200.59, MP -38.87 C, BP 356.72 C, VP 2X10^(E-3) mm Hg at 25 C, 100 mm Hg at 260 C
Seawater, soot
SHEARWATER SOOTY
FUFINIS GRISIEUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
327 Feathers			a) 14 b) 1 c) 1	a) Not given b) 0.77-0.88 ug/g c) 0.23-0.96 ug/g DRY WT	a) 0.72 + or - 0.35 ug/g b) 0.46 ug/g c) 0.54 ug/g DRY WT	a) Breast feathers b) Sequential primary wing feathers c) Sequential primary wing feathers 1-7 1-7 1-7 live or dead birds collected on beaches near Lima, 1972	Gochfeld, M. 1980 Environmental Pollution 22:197-205

Mercury
7439-97-6

Hg AtW 200-59, MP -38-87 C, BP 356-72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

SHRIMP, freshwater
MACROBRACHIUM LANCESERII

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
328 Body, whole	NA AAS			a) 0.06-0.12 ppm b) 0.02-0.04 ppm c) 0.002-0.006 ppm d) 0.006-0.008 ppm e) 0.001-0.02 ppm Net weight	a) 0.08 ppm b) 0.03 ppm c) 0.004 ppm d) 0.02 ppm e) 0.007 ppm Net weight	a) Collected 11-12/78 near caustic soda factory b) Collected 12/78 behind battery mill, 2.5 km from factory c) Collected 11/77 behind battery mill, 2.5 km from factory d) Collected 3/77 near chemical company, some distance from factory e) Control from canal in non-industrial area, collected 12/77 53 samples, 5-10 shrimp/sample	Suckcharoen, S. 1980 Bulletin of Environmental Contamination and Toxicology 24:51-514

Mercury
7439-97-6

Hg AtW 200-59, MP -38-87 C, BP 356-72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

Snake, garter

THAMNOPHIS SIRTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
329 Body, whole	Photometry		6	0.14-0.41 ppm wet wt	0.30 ppm wet wt	Snout-vent length 646-752 mm, lipid content 3-25.0%. Earthworms in stomachs of 4 snakes contained 0.06-0.17 ppm.	Heinz, G.H. Hasekine, S.D. Hall, R.J. Kryntsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25: 738-743

Mercury
7439-97-6

Hg AtW 200-59, MP -38-87 C, BP 356-72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

Snake, water

NERodia Sipedon

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
330 Body, whole	Photometry		1	Not applicable	0.45 ppm wet wt	Snout-vent length 855 mm, 6.2% lipid content	Heinz, G.H. Hasekine, S.D. Hall, R.J. Kryntsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25: 738-743

MERCURY
7439-97-6
Bq
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) m Hg at 25 C, 100 m Hg at 260 C
Squirrel, gray
SCIURUS CAROLINENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
331		AAS	a) 18	a) 0.35-4.3 ppm	a) 1.0 + or - 0.2 ppm	a) low income stratus	Jenkins, J.H.
Hair			b) 18	b) 0.20-9.2 ppm	b) 1.2 + or - 0.5 ppm	b) middle income stratus	Davis, A.H.
			c) 30	c) 0.07-6.7 ppm	c) 1.1 + or - 0.2 ppm	c) high income stratus	Bigler, R.J.
			d) 29	d) 0.07-6.7 ppm	d) 1.1 + or - 0.3 ppm	d) residential area	Hoff, G.I.
			e) 23	e) 0.15-9.2 ppm	e) 1.0 + or - 0.4 ppm	e) park	1980
			f) 10	f) 0.23-4.3 ppm	f) 0.9 + or - 0.4 ppm	f) school	Bulletin of Environmental Contamination and Toxicology 25: 321-324
			g) 4	g) 0.38-2.2 ppm	g) 0.3 ppm	g) cemetery	
			h) 34	h) 0.07-7.7 ppm	h) 1.1 + or - 0.2 ppm	h) age < 1 yr	
			i) 19	i) 0.12-3.3 ppm	i) 0.9 + or - 0.2 ppm	i) age 1 yr	
			j) 5	j) 0.30-9.2 ppm	j) 2.7 + or - 0.2 ppm	j) age 2 yr or older	
						Animals captured from 36 urban sites in 1974	
						Significantly higher values in 2 yr and older animals	
						Florida, Jacksonville	
						SQUIRRELS: BIOACCUMULATION: RADIONUCLIDES; URBAN AREAS: CERIUM; MERCURY; HAIR; MUSCLES; FLORIDA; AGE	

Mercury
7439-97-6
Bq
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) m Hg at 25 C, 100 m Hg at 260 C
Tern, Inca
TARTESINA INCA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
332			2	Not given	1.98 + or - 0.20 ug/g dry wt	Breast feathers Live or dead birds collected on beaches near Lima, 1972 Bresbold Current, Peru	Gochfeld, M. 1980 Environmental Pollution 22: 197-205

Mercury
7439-97-6
Bq
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) m Hg at 25 C, 100 m Hg at 260 C
Tuna
ZUHINNUS OPINIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
333		AAS	18	0.20-0.44 mg/kg	0.30 mg/kg	Random samples. Canned tuna. Acceptable limit in most countries = 0.5 mg/kg Farsi Gulf	Parvaneh, V. 1979 Bulletin of Environmental Contamination and Toxicology 23: 357-359

Eg Atw 200-59, Mp -38.87 C, Bp 356.72 C, Vp 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

Tuna, albacore
THUNNUS ALALONGA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
334 Muscle			a) 7 b) 3 c) 6 d) 10 e) 6 f) 5 g) 2	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.295 + or - 0.060 ppm b) 0.541 + or - 0.089 ppm c) 0.289 + or - 0.033 ppm d) 0.347 + or - 0.080 ppm e) 0.540 + or - 0.112 ppm f) 0.247 + or - 0.088 ppm g) 0.707 ppm Wet wt	a) Pacific, Oregon, length 55-69 cm b) Pacific, Oregon, length 82-89 cm c) Indian Ocean, length 78-88 cm d) Indian Ocean, length 89-99 cm e) Indian Ocean, length 102-109 cm f) Pacific, Ecuador-Peru, length 80-98 cm g) Pacific, Ecuador-Peru, length 106-110 cm White flesh, midsection White flesh, midsection Pacific Ocean (N), Oregon Indian Ocean Pacific Ocean (S), Ecuador-Peru	Greig, R. A. Kryznowek, J. 1975 Bulletin of Environmental Contamination and Toxicology 22: 120-127

MERCURY

7439-97-6

Eg Atw 200-59, Mp -38.87 C, Bp 356.72 C, Vp 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

Tuna, skipjack

THUNNUS EPIBΛMIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
335 Liver			a) 12 b) 8 c) 8 d) 8	a) Not given b) Not given c) Not given d) Not given	a) 0.080 + or - 0.050 ppm b) 0.143 + or - 0.047 ppm c) 0.165 + or - 0.060 ppm d) 0.270 + or - 0.094 ppm Wet wt	a) Eastern Atlantic, length 46-52 cm b) Hawaii, length 52-56 cm, wt 3.1-3.6 kg c) Hawaii, length 4.5-6.8 cm, wt 55-66 kg d) Hawaii, length 71-76 cm, wt 6.2-10.0 kg White flesh, midsection. Data also for other muscle sections 1570 catch.	Greig, R. A. Kryznowek, J. 1975 Bulletin of Environmental Contamination and Toxicology 22: 120-127
			a) 12 b) 8 c) 8 d) 8	a) Not given b) Not given c) Not given d) Not given	a) 0.152 + or - 0.070 ppm b) 0.211 + or - 0.038 ppm c) 0.220 + or - 0.096 ppm d) 0.359 + or - 0.082 ppm Ret wt	a) Eastern Atlantic, length 46-52 cm b) Hawaii, length 52-56 cm, wt 3.1-3.6 kg c) Hawaii, length 59-66 cm, wt 4.5-6.8 kg d) Hawaii, length 71-76 cm, wt 6.2-10.0 kg White flesh, midsection. Data also for other muscle sections 1570 catch.	Greig, R. A. Kryznowek, J. 1975 Bulletin of Environmental Contamination and Toxicology 22: 120-127
336 Muscle			a) 12 b) 8 c) 8 d) 8	a) Not given b) Not given c) Not given d) Not given	a) 0.152 + or - 0.070 ppm b) 0.211 + or - 0.038 ppm c) 0.220 + or - 0.096 ppm d) 0.359 + or - 0.082 ppm Ret wt	a) Eastern Atlantic, length 46-52 cm b) Hawaii, length 52-56 cm, wt 3.1-3.6 kg c) Hawaii, length 59-66 cm, wt 4.5-6.8 kg d) Hawaii, length 71-76 cm, wt 6.2-10.0 kg White flesh, midsection. Data also for other muscle sections 1570 catch.	Greig, R. A. Kryznowek, J. 1975 Bulletin of Environmental Contamination and Toxicology 22: 120-127

Mercury
7439-97-6
Bq
Atw 200.59, MP -38.87 C, BP 356.72 C, VP 2K10(E-3) Hg at 25 C, 100 m Hg at 260 C
Tuna, Yellowfin
THUNNUS ALBACARES

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
337 Liver			a) 14 b) 7	a) Not given b) Not given	a) 0.321 + or - 0.284 ppm b) 0.154 + or - 0.065 ppm Net wt	a) Eastern Atlantic (area A), length 138-156 cm b) Eastern Atlantic (area B), length 103-112 cm 1970 catch.	Greig, R.A. Kryznevsk, J. 1975 Bulletin of Environmental Contamination and Toxicology 22: 120-127
						Atlantic Ocean (E)	
338 Muscle			a) 15 b) 6 c) 10	a) Not given b) Not given c) Not given	a) 0.350 + or - 0.135 ppm b) 0.158 + or - 0.039 ppm c) 0.186 + or - 0.062 ppm Net wt	a) Eastern Atlantic (area A), length 138-156 cm b) Eastern Atlantic (area B), length 58-60 cm c) Eastern Atlantic (area B), length 103-112 cm white flesh, midsection. Data also for other muscle sections 1970 catch.	Greig, R.A. Kryznevsk, J. 1975 Bulletin of Environmental Contamination and Toxicology 22: 120-127
						Atlantic Ocean (E)	
						ATLANTIC OCEAN; PACIFIC OCEAN; INDIAN OCEAN; BIOACCUMULATION; WATER POLLUTION; FISHES; MERCURY; LIVER; MUSCLES	
339 Muscle			5	Not given	0.32 ppm	58% of total Hg Length 23-36 cm Concentrations highly size dependent Reservoir constructed in early 70's. Primary source is natural soil Hg. Affected decrease in soil levels Within 5 years.	Cor, J.A. Carnahan, J. Difunzo, J. McCoy, J. Neistet, J. 1979 Bulletin of Environmental Contamination and Toxicology 23: 779-783
						Illinois (S), Jackson and Union Counties, Cedar Lake Reservoir	
						MUSCLES, ILLINOIS; MERCURY; MERCURY ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION	

Mercury(II+), methyl-, ion (8 CI)
 Mercury(II+), methyl- (9 CI)
 22667-92-6
 C-83-89
 NH 215-63
 Fever
 CASTOR CANADENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE
340 Intestine			4	Not given	26 ppb	83.9% of total Hg Wt 9.96 + or - 2.06 kg (pelt not included)	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bullentin of Environmental Contamination and Toxicology 25: 100-105	
				No direct sources of contamination in trapping area				
341 Kidney			4	Not given	29 ppb	87.8% of total Hg Wt 9.96 + or - 2.06 kg (pelt not included)	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bullentin of Environmental Contamination and Toxicology 25: 100-105	
				No direct sources of contamination in trapping area				
342 Liver			4	Not given	25 ppb	78.1% of total Hg Wt 9.96 + or - 2.06 kg (pelt not included)	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bullentin of Environmental Contamination and Toxicology 25: 100-105	
				No direct sources of contamination in trapping area				
343 Muscle			4	Not given	27 ppb	84.4% of total Hg Wt 9.96 + or - 2.06 kg (pelt not included)	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bullentin of Environmental Contamination and Toxicology 25: 100-105	
				No direct sources of contamination in trapping area				

Mercury(1+), methyl-, ion (8 CI)
 Mercury(1+), methyl-, methyl- (9 CI)
 C-H₃-Hg
 2,967-9-6
 Hg 215.63
 Chicken

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
344 Eggs	Ingestion	GC	2	a) 400-6700 ng/g b) 480-490 ng/g	a) 5750 ng/g b) 485 ng/g	a) White, 95% of total Hg b) Volk, 12.8% of total Hg Total levels 100-1000X higher than in market eggs from domestic chickens accidentally fed fungicide-treated grain. CHICKENS; EGGS; NEW YORK; PUNGICIDES; MERCURY INORGANIC COMPOUNDS; MERCURY ORGANIC COMPOUNDS; SELENIUM; BIOACCUMULATION	Cappo, C.J. Smith, J.C. 1981a Bulletin of Environmental Contamination and Toxicology 26: 472-478

Mercury(1+), methyl-, ion (8 CI)
 Mercury(1+), methyl-, methyl- (9 CI)
 C-H₃-Hg
 Hg 215.63
 deer, whitetail

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
345 Heart		GC	1	Not applicable	46.9 ppb wet wt	43.7% of total Hg Rural area. No known contamination source. New York State (N)	Cappo, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
346 Liver		GC	1	Not applicable	43.4 ppb wet wt	RIVER; SEALS; CANADA; NEW YORK; HEART; LIVER; MUSCLE; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SILENIUS	New York State (N)
347 Muscle		GC	1	Not applicable	18.5 ppb wet wt	20% of total Hg Rural area. No known contamination source. New York State (N)	Cappo, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

Mercury(1+), methyl-, ion (8 CI)
Mercury(1+), methyl- (9 CI)
22967-92-6
C-Hg
NR 215.63

Citter
UTRA CANADENSIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
348 Intestine			4	Not given	391 ppb	93.3% of total Hg Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25; 100-105
						Canada, Precambrian Shield, Ontario Muskoka District	
						FEATHERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	
349 Kidney			4	Not given	628 ppb	628 of total Hg Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25; 100-105
						Canada, Precambrian Shield, Ontario Muskoka District	
						FEATHERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	
350 Liver			4	Not given	889 ppb	29.9% of total Hg Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25; 100-105
						Canada, Precambrian Shield, Ontario Muskoka District	
						FEATHERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	
351 Muscle			4	Not given	640 ppb	72.0% of total Hg Wt 7.33 + or - 1.81 kg (pelt not included) No direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25; 100-105
						Canada, Precambrian Shield, Ontario Muskoka District	
						FEATHERS; RACCOONS; OTTERS; CANADA; INTESTINES; KIDNEYS; LIVER; MUSCLES; BIOACCUMULATION; MERCURY; MERCURY ORGANIC COMPOUNDS	

Mercury(1+); methyl-, ion (8 CI)
 Mercury(1+); methyl-, ion (9 CI)
 22667-92-6
 C-13-99
 NW 215.63
 Raccoon
 FECYN LATOR

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
352 Kidney			4	Not given	425 ppb	87.8% of total Hg At 50 + or - 0.86 kg (peel not included). BC direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25; 106-105
353 Liver			4	Not given	484 ppb	10.7% of total Hg At 50 + or - 0.86 kg (peel not included). BC direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25; 106-105
354 Muscle			4	Not given	235 ppb	58.4% of total Hg At 50 + or - 0.86 kg (peel not included). BC direct sources of contamination in trapping area	Wren, C. MacCrimmon, H. Frank, R. Suda, P. 1980 Bulletin of Environmental Contamination and Toxicology 25; 106-105
TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
355 Liver		GC	1	Not applicable	476.2 ppb wet wt	5.1% of total Hg	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

(NEXT PAGE)

Mercury (1+) methyl-, ion (8 CI)
 Mercury (1+), methyl-, methyl- (9 CI)
 22967-92-6
 C-13-Bq
 MW 215.63
 Seal

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
356 Muscle	GC	1	Not applicable	267.9 ppb wet wt	62.9% total Hg	Capon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98 REF: SEALS; CANADA: NEW YORK; HEART; LIVER; MUSCLE; COMPARATIVE EVANALYSIS; BIOACCUMULATION; MERCURY; SILENIUM	

Sciurus
 7439-98-7
 No
 Atw 95-94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
 Antelope, pronghorn
 ANTLIOPA AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
357 Kidney	AAS	27	< 2 ug/g dry wt	Not given	Ages < 10-85 yo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Containment and Toxicology 22:827-832 REF: ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; NICKEL; ZINC	
358 Liver	AAS		< 2 ug/g dry wt	Not given	Ages < 10-85 yo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Containment and Toxicology 22:827-832 REF: ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; NICKEL; ZINC	

Molybdenus
7439-98-7
NC
Atw 95-94, MP 2622 C, BP 4825 C (approx). • VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Cattle
ECS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION		REFERENCE
359 Blood	Ingestion	AAS	20	a) Not applicable b) 0.00-0.096 ppm. c) Not applicable d) 0.030-0.060 ppm.	a) < 0.01 ppm b) 0.05 ppm c) < 0.01 ppm d) 0.048 ppm	a) Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, post-test c) Controls, pre-test d) Controls, post-test	Grazing on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb./acre). Affilled 5/79 and 7/79 Black, White-faced calves, mean pre-test wt 337 lb., mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
				No pathological changes				
360 Kidney	Ingestion	AAS	190	Not detected-1.85 ppm wet wt	0.31 + or - 0.28 ppm wet wt	Samples from widely separated regions. Significant differences between regions and within the same region.	Australia, New South Wales CATTLE: ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SILENIUM; ZINC; AUSTRALIA: KIDNEYS; LIVER; MUSCLES Plankak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507	Plankak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
				No pathological changes				
361 Kidney	Ingestion	AAS	4	a) Not given b) Not given	a) 1.35 ppm b) 5.04 ppm wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 ac on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb./acre). Affilled 5/79 and 7/79 Black, White-faced calves, mean pre-test wt 337 lb., mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311	
				No pathological changes				
362 Liver		AAS	190	< 0.15-2.41 ppm wet wt	0.88 + or - 0.39 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region.	Australia, New South Wales CATTLE: ARSENIC; CADMIUM; CHROMIUM; COBALT; COPPER; LEAD; MANGANESE; MERCURY; MOLYBDENUM; NICKEL; SILENIUM; ZINC; AUSTRALIA: KIDNEYS; LIVER Plankak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507	Plankak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

Holypdenum
7439-98-7
Mo
ATH 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Cattle
FES SP.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
363 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 1.83 ppm b) 4.58 ppm Ret wt	i) Pastures fertilized with treated raffinate Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
						NC pathological changes	
						CATTLE; BIFENATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Veterinary and Human Toxicology 22(5):309-311
364 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.90 ppm b) 3.89 ppm Ret wt	i) Pastures fertilized with treated raffinate Grazing on 6 no plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
						NC pathological changes	
						CATTLE; BIFENATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Veterinary and Human Toxicology 22(5):309-311
Holypdenum 7439-98-7 Mo ATH 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C Deer male CLOACILEMIS HEMIMONDS							
TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
365 Kidney		AAS	30	< 2 ug/g dry wt	Not given	Deer; ANTOPE; MONTAN; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Hunsaker, F.P. Neuman, D.R. 1979 Bullentin of Environmental Contamination and Toxicology 22:827-832
						Deer; ANTOPE; MONTAN; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	

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Holypdenum
7439-98-7

Mo
ATH 95.94, MP 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Deer male
CLOACILEMIS HEMIMONDS

Molybdenum

No 7439-98-7
At 95.94, MF 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
reer, mule

CROCUSUS HERIENSIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN	REFERENCE	
366 Kidney	AAS	a) 12 b) 6	a) 0.9-4.0 ppm b) 1.3-2.4 ppm dry wt	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Captured 1/79 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin.	a) 2.1 + or - 1.0 ppm b) 1.9 + or - 2.4 ppm dry wt	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182	
367 Liver	AAS		< 2 ug/g dry wt	Not given	Aggs < 10-85 %, assumed healthy. Vegetation analysis indicates Fristine areas free from gross Pollution.	Hunsaker, P.P. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832	
368 Liver	AAS	a) 12 b) 6	a) 0.6-2.8 ppm b) 0.7-2.4 ppm dry wt	a) Adults (1.5 yr and older) b) Fawns (0.5 yr) Captured 1/9 near oil shale tracts before mining initiated. Colorado, Rio Blanco County, Piceance Creek Basin.	a) 1.3 + or - 0.7 ppm b) 1.3 + or - 0.6 ppm dry wt	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182	

Molybdenum

No 7439-98-7
At 95.94, MF 2622 C, BP 4825 C (approx), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
reer, mule
FERONIUS MANICULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN	REFERENCE	
369 Kidney	AAS	a) 45 b) 45 c) 45	a) 4-2.6-9 ppm b) 4-9-8.7 ppm c) 6.8-9.2 ppm dry wt	a) 5.7 + or - 0.7 ppm b) 6.3 + or - 1.2 ppm c) 7.8 + or - 0.7 ppm dry wt	Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182		

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Sciurus
7439-98-7

No. 95-94, MP 2622 C, BP 4825 C (approx.), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
atw 95.94, MP 4825 C (approx.), VP 1 mm Hg at 3300 C, 10 mm Hg at 3770 C
Rabbit, deer

FERONIUS MANICULATUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN	SD	
370 Liver		AAS	a) 45 b) 45 c) 45	a) 4.4-9.0 ppm b) 5.8-12.0 ppm c) 5.7-10.0 ppm DRY wt	a) 6.5 + or - 1.4 ppm b) 8.0 + or - 1.8 ppm c) 5.7 + or - 10.0 ppm		Stetler, L.H. 1980 Journal of Wildlife Diseases 16(2):175-182

Nickel
7440-02-0

ATW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Antelope, pronghorn
ANTilocapra americana

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN	SD	
371 Kidney		AAS		Most were < 0.5 mg/g dry wt	Not given		Munshower, F.F., Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
372 Liver		AAS		Most were < 0.5 mg/g dry wt	Not given		Munshower, F.F., Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Nickel
7440-02-0
Atw 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Cattle
ECS sp.

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
373 Blood	Ingestion	AAS	20	a) Not applicable b) Not applicable	a) 0.10 ppm b) 0.10 ppm	<p>a) Pastures fertilized with treated raffinate b) Controls on plots treated with Grazing 6 mo on plots treated with commercial fertilizer (100 lb N acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.</p> <p>NC pathological changes</p> <p>CATTLE: RAFFINATE; RADIUM 226; CADMIUM; ARSENIC; CADMUM; CHROMIUM; COPPER; LEAD; MOLEBDENUM; NICKEL; OSMIUM; ZINC; BIOACCUMULATION; CALCIUM; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES</p>
374 Kidney	Ingestion	AAS	190	Not detected-5.80 ppm wet wt	0.46 + or - 0.87 ppm wet wt	<p>Samples from 8 widely separated regions. Significant differences between regions and within the same region.</p> <p>Australia, New South Wales</p> <p>CATTLE: ARSENIC; CADMIUM; CHROMIUM; COPPER; LEAD; MANGANESE; MERCURY; MOLEBDENUM; NICKEL; OSMIUM; ZINC; BIOACCUMULATION; CALCIUM; BLOOD; BLOOD SERUM; KIDNEYS; LIVER</p>
375 Kidney	Ingestion	AAS	4	a) Not given b) Not given	a) 0.10 ppm b) 0.16 ppm wet wt	<p>a) Pastures fertilized with treated raffinate b) Controls on plots treated with Grazing 6 mo on plots treated with commercial fertilizer (100 lb N acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb.</p> <p>NC pathological changes</p> <p>CATTLE: RAFFINATE; RADIUM 226; CADMIUM; ARSENIC; CADMUM; CHROMIUM; COPPER; LEAD; MOLEBDENUM; NICKEL; OSMIUM; ZINC; BIOACCUMULATION; CALCIUM; BLOOD; BLOOD SERUM; KIDNEYS; LIVER</p>
376 Liver			190	< 0.04-4.82 ppm wet wt	0.33 + or - 0.54 ppm wet wt	<p>Samples from 8 widely separated regions. Significant differences between regions and within the same region.</p> <p>Australia, New South Wales</p> <p>CATTLE: ARSENIC; CADMIUM; CHROMIUM; COPPER; LEAD; MANGANESE; MERCURY; MOLEBDENUM; NICKEL; OSMIUM; ZINC; BIOACCUMULATION; CALCIUM; BLOOD; BLOOD SERUM; KIDNEYS; LIVER</p>

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Nickel
7440-02-0
Bi
Atw 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Cattle
BCS Sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
377 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.13 ppm b) 0.07 ppm wt wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb /Acre) or commercial fertilizer (100 lb /acre). Applied 5/79 and 7/79 Black, white-faced calves, seen Pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes	Edwards, R.C. Dooly, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
378 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.16 ppm b) 0.15 ppm wt wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb /Acre) or commercial fertilizer (100 lb /acre). Applied 5/79 and 7/79 Black, white-faced calves, seen Pre-test wt 337 lb, mean post-test wt 665 lb. No Pathological changes	Edwards, R.C. Dooly, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Nickel
7440-02-0
Atw 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Deer, mule
CROCOLEUS HEMIONUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
379 Kidney		AAS		Most were < 0.5 mg/g dry wt	Not given	Agg < 10-85 mg assumed healthy. Vegetation analysis indicates prairie area free from gross pollution.	Munshower, F.P. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

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Nickel
7440-02-0
Ni
AW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Deer, male
CROCOLIUS HENIOCHUS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
380 Liver	AAS		Most were < 0.5 mg/g dry wt	Not given		Ages < 10-85 mo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, P.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 627-632

Nickel
7440-02-0
Ni
AW 58.71, MP 1455 C, BP 2837 C, VP 10 mm Hg at 2090 C, 100 mm Hg at 2370 C
Grouse, ruffed
ECNASSA UMBELLUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
381 Feathers	AAS	130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.06 + or - 0.05 us/g b) 0.02 + or - 0.02 us/g c) 0.06 + or - 0.05 us/g d) 0.02 + or - 0.02 us/g e) 0.01 + or - 0.01 us/g f) 0.10 + or - 0.09 us/g	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest Ring and tail feathers Birds shot by hunters in remote forest area.	FIRDS: PTERIORS: JUVENILES: CADMIUM; CCPb; LEAD; NICKEL; SILVER; ZINC; VIRGINIA: ADULTS	Scanlon, P.F. Oderwald, R.G. Dietrick, T.J. Coggin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25: 947-949

Octanohydroxamic acid (8 CI)
Octanamide, N-hydroxy- (9 CI)
7377-03-9
CB-B17-10-02
MW 159.23 MP 78.5-79 C
Trout, brook
SALVELINUS fontinalis

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
382 Adipose	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 3.5 + or - 2.8 us/g b) 6.5 + or - 2.3 us/g c) 8.6 + or - 6.2 us/g	a) 24 hr b) 98 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6-7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g.	DARREY, D.C. ADDISON, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22: 265-270	

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Octanohydroxamic acid (8 CI)
 Octanamide, N-hydroxy- (9 CI)
 7377-03-9
 CB-H17-W-02
 PR 159, 23 MP 78.5-79 C
 Trout, brook
 SALVELINUS FONTINALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION			REFERENCE
					MEAN	STDEV	TIME OF EXPOSURE	
383 Bile	Radioometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 257.2 + or - 184.4 b) 607.5 + or - 184.4 c) 437.6 + or - 202.1 ng/g Net wt 75-150 g.	a) 24 hr b) 48 hr c) 72 hr		Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
384 Blood, Plasma	Radioometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 4.9 + or - 2.3 ng/g b) 7.4 + or - 3.2 ng/g c) 10.5 + or - 1.9 ng/g Net wt	a) 24 hr b) 48 hr c) 72 hr		Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
385 Brain	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 12.3 + or - 5.3 ng/g b) 17.1 + or - 1.0 ng/g c) 25.2 + or - 9.4 ng/g Net wt	a) 24 hr b) 48 hr c) 72 hr		Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
386 Cecum	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 10.9 + or - 4.2 ng/g b) 22.5 + or - 3.2 ng/g c) 26.9 + or - 2.9 ng/g Net wt	a) 24 hr b) 48 hr c) 72 hr		Time of exposure in 3 l H2O containing 6-7 mg/l n-octano-1-C14-hydroxamic acid	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270

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Octanohydroxamic acid (8 CI)
 Octanohydroxamic acid (9 CI)
 7377-33-9
 CB-H17-N-02
 MW 159.23, MP 78.5-79 C
 Trout, brook trout
 SALVELINUS FONTINALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
387 Gills	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 19.0 + or - 4.3 ug/g b) 25.5 + or - 3.6 ug/g c) 31.6 + or - 6.3 ug/g	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6.7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g. CICUM: GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILI; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL ECLIUTION; WATER POLLUTION	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22: 265-270	
388 Gonads	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 6.6 + or - 2.4 ug/g b) 13.8 + or - 8.3 ug/g c) 24.0 ug/g Net wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6.7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g.	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22: 265-270	
389 Heart	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 6.8 + or - 3.3 ug/g b) 11.8 + or - 5.7 ug/g c) 14.2 + or - 4.9 ug/g Net wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6.7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g. CICUM: GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILI; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL ECLIUTION; WATER POLLUTION	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22: 265-270	
390 Intestine	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 10.6 + or - 4.4 ug/g b) 22.8 + or - 7.0 ug/g c) 33.5 + or - 8.1 ug/g Net wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6.7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g. CICUM: GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILI; BLOOD PLASMA; BRAIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; BIOACCUMULATION; FISHES; INDUSTRIAL ECLIUTION; WATER POLLUTION	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22: 265-270	

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Octanohydroxamic acid (8 CI)
 Octanamide, N-hydroxy- (9 CI)
 7377-33-9
 C8-817-N-02
 FW 155.23, RF 78.5-79 C
 Trout, Brook
SALVELINUS FONTINALIS

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
391 Kidney	Radioometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 11.3 + or - 6.5 ug/g b) 14.7 + or - 4.8 ug/g c) 25.9 + or - 7.2 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6-7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g.	GILLS: ALKYHYDROXAMIC ACIDS; GONADS: ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; ERIN; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; EIOACCUMLATION: FISHES; INDUSTRIAL ECLUTION: WATER POLLUTION	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
392 Liver	Radioometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 26.4 + or - 11.5 ug/g b) 34.6 + or - 12.5 ug/g c) 40.5 + or - 5.2 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6-7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g.	GILLS: ALKYHYDROXAMIC ACIDS; GONADS: ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; ERIN; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; EIOACCUMLATION: FISHES; INDUSTRIAL ECLUTION: WATER POLLUTION	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
393 Muscle	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 2.8 + or - 0.5 ug/g b) 4.0 + or - 1.2 ug/g c) 4.7 + or - 0.5 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6-7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g.	GILLS: ALKYHYDROXAMIC ACIDS; GONADS: ADULTS; ADIPOSE TISSUE; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; EIOACCUMLATION: FISHES; INDUSTRIAL ECLUTION: WATER POLLUTION	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270
394 Skin	Radiometry	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 18.7 + or - 4.5 ug/g b) 20.4 + or - 3.7 ug/g c) 30.1 + or - 10.5 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H ₂ O containing 6-7 mg/l n-octano-1-C ₁₄ -hydroxamic acid Fish wt 75-150 g.	GILLS: ALKYHYDROXAMIC ACIDS; GONADS: ADULTS; ADIPOSE TISSUE; BILE; BLOOD PLASMA; ERIN; BRAIN; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPLEEN; STOMACH; EIOACCUMLATION: FISHES; INDUSTRIAL ECLUTION: WATER POLLUTION	Darrow, D.C. Addison, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22:265-270

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cotanohydroxamic acid (8 CI)
 Octanoamide, N-hydroxy- (9 CI)
 CS-H17-03-9
 CS-H17-00-02
 RR 159-23, MF 78-5-79 C
 trout, brook
Salvelinus fontinalis

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
395 Spleen	Radiotherapy	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 11.7 + or - 7.1 ug/g b) 20.5 + or - 4.6 ug/g c) 23.6 + or - 6.6 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l nonoctano-1-hydroxamic acid Fish wt 75-150 g.	CICUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILIA; BLOOD PLASMA; ERIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPERM; STOMACH Bioaccumulation; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	DARROW, D.C. ADDISON, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22: 265-270
396 Stomach	Radiotherapy	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 7.4 + or - 3.3 ug/g b) 10.2 + or - 4.4 ug/g c) 14.7 + or - 2.9 ug/g Wet wt	a) 24 hr b) 48 hr c) 72 hr Time of exposure in 3 l H2O containing 6-7 mg/l nonoctano-1-hydroxamic acid Fish wt 75-150 g.	CICUM; GONADS; GILLS; ALKYLHYDROXAMIC ACIDS; CANADA; ADULTS; ADIPOSE TISSUE; BILIA; BLOOD PLASMA; ERIN; HEART; INTESTINES; KIDNEYS; LIVER; MUSCLES; SKIN; SPERM; STOMACH Bioaccumulation; FISHES; INDUSTRIAL POLLUTION; WATER POLLUTION	DARROW, D.C. ADDISON, R.P. 1979 Bulletin of Environmental Contamination and Toxicology 22: 265-270

Phenoxy, Pentachloro-
 E7-86-5
 C6-B-15-0
 FN 266-35, MP 190-191 C, BP 309-310 C (decomp), VP 40 mm Hg at 211.2 C
 Swine
 SGS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
397 Blood	Ingestion		24	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 62.9 + or - 8.81 pm b) 78.1 + or - 5.28 pm c) 64.1 + or - 6.14 pm d) 67.6 + or - 12.6 pm e) 71.5 + or - 77.0 pm f) 77.0 + or - 12.7 pm g) 0.53 + or - 0.27 pm h) 0.74 + or - 0.19 pm Net wt	a) After 5 mg/kg body wt/day for 15 days b) After 5 mg/kg body wt/day for 30 days c) After 10 mg/kg body wt/day for 15 days d) After 10 mg/kg body wt/day for 30 days e) After 15 mg/kg body wt/day for 15 days f) After 15 mg/kg body wt/day for 30 days g) Controls, given lactose for 15 days h) Controls, given lactose for 30 days 6 wk old pigs.	Greichus, Y.A. Libal, G.W. Johnson, D.D. 1979 Bulletin of Environmental Contamination and Toxicology 23: 418-422
398 Kidney	Ingestion		6	a) Not given b) Not given c) Not given d) Not given	a) 22.0 + or - 3.16 pm b) 25.2 + or - 4.20 pm c) 26.6 + or - 3.27 pm d) 0.21 + or - 0.07 pm Net wt	a) After 5 mg/kg body wt/day for 30 days b) After 10 mg/kg body wt/day for 30 days c) After 15 mg/kg body wt/day for 30 days d) Controls 6 wk old Pigs.	Greichus, Y.A. Libal, G.W. Johnson, D.D. 1979 Bulletin of Environmental Contamination and Toxicology 23: 418-422
399 Liver	Ingestion		6	a) Not given b) Not given c) Not given d) Not given	a) 28.9 + or - 10.7 pm b) 26.1 + or - 1.89 pm c) 28.8 + or - 4.65 pm d) 0.54 + or - 0.12 pm Net wt	a) After 5 mg/kg body wt/day for 30 days b) After 10 mg/kg body wt/day for 30 days c) After 15 mg/kg body wt/day for 30 days d) Controls 6 wk old pigs.	Greichus, Y.A. Libal, G.W. Johnson, D.D. 1979 Bulletin of Environmental Contamination and Toxicology 23: 418-422
						No overt signs of toxicosis.	JUVENILES: PIGS; SOUTH DAKOTA; AUTOPSES; BLOOD; KIDNEYS; LIVER; MUSCLE; BIACCUMULATION; CHLORINE ORGANIC COMPOUNDS
						No overt signs of toxicosis.	JUVENILES: PIGS; SOUTH DAKOTA; AUTOPSES; BLOOD; KIDNEYS; LIVER; MUSCLE; BIACCUMULATION; CHLORINE ORGANIC COMPOUNDS
						No overt signs of toxicosis.	JUVENILES: PIGS; SOUTH DAKOTA; AUTOPSES; BLOOD; KIDNEYS; LIVER; MUSCLE; BIACCUMULATION; CHLORINE ORGANIC COMPOUNDS

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Phenol, pentachloro-
C₆-H-CI₅-O
FW 266.35, MF 190-191 C, BP 309-310 C (decomp), VP 40 mm Hg at 211.2 C
Swine
sus sp.

(CONTINUED)

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
400 Muscle	Ingestion		a) 6 b) 6 c) 6 d) 6	a) Not Given b) Not Given c) Not Given d) Not Given	a) After 5 mg/kg body wt/day for 30 days b) After 10 mg/kg body wt/day for 30 days c) After 15 mg/kg body wt/day for 30 days d) Controls e) 6 wk old Pigs.	Grechus, Y.A. Libal, G.W. Johnson, D.D. 1979 Bulletin of Environmental Contamination and Toxicology 23:418-422

Phenol, 2,2'-methylenebis(3,4,6-trichloro-
7C-30-4
C13-H6-C16-C2
FW 406.92, MF 164-165 C
Cattle
ECS sp.

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
401 Adipose	Ingestion	GC	2	5-10 ng/g wet wt	8 ng/g wet wt	Lactating cows, wt 550 kg. 4 mg/kg HCP and 10 mg/kg Cu-glycinate in diet daily for 2 d. Killed 3 d after 2nd dose. CATTLE: LACTATION; BIOACCUMULATION; LACTATION; PESTICIDE RESIDUES; BIFENZILOBENZENE; ADIPOSE TISSUE; ELOOD: LIVER; MUSCLES: JAPAN
402 Blood	Ingestion	GC	2	6-10 ng/ml	8 ng/ml	Kawashima, Y. Miyahara, T. Kozuka, H. Ohnara, C. 1981 Bulletin of Environmental Contamination and Toxicology 26:424-427
403 Liver	Ingestion	GC	2	210-230 ng/g wet wt	220 ng/g wet wt	Kawashima, Y. Miyahara, T. Kozuka, H. Ohnara, C. 1981 Bulletin of Environmental Contamination and Toxicology 26:424-427

(NEXT PAGE)

Phenol, 2,2'-methylenebis[3,4,6-trichloro-
 70-0-4
 C13-H6-C16-02
 MW 406.92, MF 164-165 C
 FCS sp.
 Cattle

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
404 Muscle	Ingestion	GC	2	20-35 ng/g wet wt	28 ng/g wet wt	Lactating cows, wt 550 kg, 4 mg/kg HCP and 10 mg/kg Cr-glycinate in diet daily for 2 d. Killed 3 d after 2nd dose.	Kawashita, Y. Miyake, T. Kozuka, H. Ohdair, C. 1981 CATTLE; LACTATION; BIOACCUMULATION; LACTATION; PESTICIDE RESIDUE; BENACHLOROBENZENE; ADIPOSE TISSUE; BLOOD; LIVER; MUSCLES; JAPAN TOXICOLOGY 26:424-427

Phosphorothioic acid, O,O-dimethyl O-(3-methylthio)-S-methyl ester (8 CI)
 Phosphorothioic acid, O,O-dimethyl O-(3-methyl-4-[methylthio]Phenyl) ester (9 CI)
 55-38-9
 C10-H15-3-P-S2
 MW 278.34 C, BP 105 C, VP 3X10 (8-5) mm Hg at 20 C
 Basipic
 FICA FICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
405 Gizzard	Ingestion	GC	10	7.29-483 mg/kg wet wt	87.10 mg/kg wet wt	Lining plus contents. Dead birds found near feed where cattle were treated for warble larvae and lice. Canada, Alberta	Hanson, J. Howell, J. 1981 Canadian Veterinary Journal 22:18-19 Generally good body condition. Inability to fly just before death. Frusses and bone fractures, congestion of skull bones. CANADA; AUTOPSY; GIZZARD; BIRDS; ORGANO PHOSPHATES; BIOACCUMULATION; PESTICIDE RESIDUES

Iclonius, isotope of mass 210
 1398-52-7
 Fc
 MW 210, MP 254 C, BP 962 C
 Cattle
 PCS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
406 Kidney			a) 35 b) Not given b) Not given	a) 57.8-387.8 pCi/kg wet b) Not given b) Not given	a) 152.4 pCi/kg b) 178.5 pCi/kg Net wt Medians	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from Previous Publication) Germany, Riftel area	Bunzl, K. Kracke, H. 1980 Food and Cosmetics Toxicology 18:133-137 CATTLE; LEAD 210; POLONIUM 210; GERMANY; KIDNEYS; LIVER; COMBATIVE EVALUATIONS; LEAD; BIOACCUMULATION; FISHING; RADIONUCLIDES

(NEXT PAGE)

Polonium, isotope of mass 210
 FC
 EW 210, MP 254 C, BP 962 C
 Cattle
 ECS spp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
407 Liver		a) 35 b) Not given	a) 13.9-159 pCi/kg wet wt b) Not given	a) 33.3 pCi/kg b) 35.8 pCi/kg Net wt mediums	a) Cattle grazing near abandoned Pb mine b) Controls from non-industrial, low-traffic area (data from previous publication) 2 yr olds	Bunzl, K. Kracke, W. 1980 Food and Cosmetics Toxicology 18:133-137	

Tyrene
 129-00-0
 C16-H10
 MW 202.24, MP 156 C, BP 404 C
 Fatty acids, black sea
 CENTROBRITUS STRICTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
408 Body, whole		GC UV	Not given	< 1 ppb wet wt	Dry wt/net wt = 0.23 Composite sample of several organisms collected in oil drilling area, depth 57 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879	

Tyrene
 129-00-0
 C16-H10
 MW 202.24, MP 156 C, BP 404 C
 Butterfish
 FAIRIUS TRIACANTHUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
409 Body, whole		GC UV	Not given	< 1 ppb wet wt	Dry wt/net wt = 0.29 composite sample of several organisms collected in oil drilling area, depth 39 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7):878-879	

Tyrene
 129-00-0
 C16-H10
 MW 202.24, MP 156 C, BP 404 C
 Butterfish
 FAIRIUS TRIACANTHUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
						ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; BIACCUMULATION; WATER POLLUTION; FISHES	

Fyrene
129-00-0
C16-H10
MW 202.24, MP 156 C, BP 404 C
Flounder, summer
PARALICHTHYS DENTATUS

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
410 Body, whole	GC UV	Not given	2 PPD wet wt	dry wt/wet wt = 0.21 Collected in oil drilling area, depth 102 m	Brown, R.A. Fomicov, R.J. 1979 Environmental Science and Technology 13(7):878-879	

Fyrene
129-00-0
C16-H10
MW 202.24, MP 156 C, BP 404 C
Bake, red
ARCPHYSATE CHUSS

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
411 Body, whole	GC UV	Not given	< 5 ppb wet wt	Composite sample of several organisms Collected in oil drilling area, depth 78 m	Brown, R.A. Fomicov, R.J. 1979 Environmental Science and Technology 13(7):878-879	

Fyrene
129-00-0
C16-H10
MW 202.24, MP 156 C, BP 404 C
scallop, sea
FLACOPSKIN MAGELLANICUS

Tissue	Exposure Route	Analytical Method	Number of Cases	General Information		Reference
				Range	Mean	
412 Body, whole	GC UV	Not given	4.1 ppb wet wt	Composite sample of several organisms Collected in oil drilling area, depth 78 m	Brown, R.A. Fomicov, R.J. 1979 Environmental Science and Technology 13(7):878-879	

Pyrene
 129-00-0
 C16-H10
 MW 202.24. MF 156 C, BP 404 C
 Scup
Synodus chrysops

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
413 Body, whole	GC UV		Not given	Dry wt/wet wt = 0.26 Composite sample of several organisms Collected in oil drilling area, depth 66 m	2 ppb wet wt	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879	

Pyrene, methyl-
 27577-90-8

C17-H12
 MW 216.29

Fatty, black sea

Centropristes stricta

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
414 Body, whole	GC UV		Not given	< 1 ppb wet wt	< 1 ppb wet wt	Dry wt/wet wt = 0.23 Composite sample of several organisms Collected in oil drilling area, depth 57 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879

Pyrene, methyl-
 27577-90-8

C17-H12
 MW 216.29

Butterfish

Tapirus triacanthus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
415 Body, whole	GC UV		Not given	< 2 ppb wet wt	< 2 ppb wet wt	Dry wt/wet wt = 0.29 Composite sample of several organisms Collected in oil drilling area, depth 35 m	Brown, R.A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879

ATLANTIC OCEAN; POLYNUCLEAR AROMATIC
 HYDROCARBONS; NEW JERSEY; BCY;
 BIOACCUMULATION; WATER POLLUTION;
 FISHES

ATLANTIC OCEAN; POLYNUCLEAR AROMATIC
 HYDROCARBONS; NEW JERSEY; BODY;
 BIOACCUMULATION; WATER POLLUTION;
 FISHES

Pyrene, methyl-
 27577-90-8
 C17-H12
 MW 216.29
 Flounder, summer
 PARALICHTHYS DENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
416 Body, whole	GC UV		Not given	1 ppb wet wt		Dry wt/wet wt = 0.21 Composite sample of several organisms Collected in oil drilling area, depth 102 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; FIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pacirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
 27577-90-8
 C17-H12
 MW 216.29
 Egg, red
 AROPHISITE CHUSS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
417 Body, whole	GC UV		Not given	< 6 ppb wet wt		Composite sample of several organisms Collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; FIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pacirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
 27577-90-8
 C17-H12
 MW 216.29
 Scallop, sea
 FLACOPESKIN MAGELLANICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
418 Body, whole	GC UV		Not given	2.7 ppb wet wt		Composite sample of several organisms Collected in oil drilling area, depth 78 m Atlantic Ocean, Baltimore Canyon ATLANTIC OCEAN; POLYNUCLEAR AROMATIC HYDROCARBONS; NEW JERSEY; BODY; FIOACCUMULATION; WATER POLLUTION; FISHES	Brown, R.A. Pacirov, R.J. 1979 Environmental Science and Technology 13(7):878-879

Pyrene, methyl-
 27377-50-8
 C17-H12
 MW 216.29
 SCUF
 STENOMUS CHRYSIOPS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
419 Body, whole	GC UV		Not given	< 1 PPb wet wt	Fry wt/wet wt = 0.26 Composite sample of several organisms collected in oil drilling area, depth 66 m ATLANTIC OCEAN, Baltimore Canyon	BROWN, R. A. Pancirov, R.J. 1979 Environmental Science and Technology 13(7): 878-879	

Badium, isotope of mass 226
 13982-63-3
 86
 MW 226, MP 700 °C, BP 1737 °C
 Cattle
 ETS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
420 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.003 PCl/g b) 0.005 PCl/g	b) Pastures fertilized with treated raffinate i) Controls Grazing 6 ac on plots treated with raffinate (100 lb/Acre) or commercial fertilizer (100 lb/Acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE: RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CALCIUM; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C.- Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5): 309-311
421 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.002 PCl/g b) 0.002 PCl/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 ac on plots treated with raffinate (100 lb/Acre) or commercial fertilizer (100 lb/Acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes CATTLE: RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; CALCIUM; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Edwards, W.C.- Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5): 309-311

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
422 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.001 PC1/g b) 0.002 PC1/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mc on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb Macrol, AP filled 5/9 and 7/9 black, white-faced calves, mean pre-test wt 237 lb, mean post-test wt 665 lb. No pathological changes	Edwards, H.C. Booley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Selenium
 7702-99-2
 Se
 At 78.96. MF 170-217 C, BP 685 C, VP 1 nm Hg at 356 C, 10 nm Hg at 429 C
 Cattle
 FCS spp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
423 Kidney		AAS	190	0.47-1.77 ppm wet wt	1.10 + or - 0.31 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales	Flanajak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
424 Liver		AAS	190	0.01-0.63 ppm wet wt	0.17 + or - 0.11 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales	Flanajak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

selenius
 57782-49-2
 AW 78-36. MF 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
 Chicken

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	GENERAL INFORMATION		REFERENCE
				RANGE	MEAN	
425 Egg	GC		2	a) 150-240 ng/g b) Not applicable c) 130-150 ng/g d) 400-500 ng/g	a) 195 ng/g b) 20 ng/g c) 100 ng/g d) 450 ng/g	Capon, C.J. Smith, J.C. 1981a Bulletin of Environmental Contamination and Toxicology 26:472-478

CHICKENS; EGGS; NEW YORK; FUNGICIDES;
 MERCURY; INORGANIC COMPOUNDS; MERCURY;
 ORGANIC COMPOUNDS; SELNIUS;
 BIOACCUMULATION

selenius
 57782-49-2
 AW 78-96. MF 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
 Deer, Whitetail

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	GENERAL INFORMATION		REFERENCE
				RANGE	MEAN	
426 Heart	GC		1	a) Not applicable b) Not applicable	a) 160.5 ppb b) 40.0 ppb Net wt	Capon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
						New York State (W)
						DEER; SPAIN; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELNIUS
427 Liver	GC		1	a) Not applicable b) Not applicable	a) 264.5 ppb b) 30.5 ppb Net wt	Capon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
						New York State (W)
						DEER; SPAIN; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELNIUS
428 Muscle	GC		1	a) Not applicable b) Not applicable	a) 133.8 ppb b) 75.9 ppb Net wt	Capon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
						New York State (W)
						DEER; SPAIN; CANADA; NEW YORK; HEART; LIVER; MUSCLES; COMPARATIVE EVALUATIONS; BIOACCUMULATION; MERCURY; SELNIUS

Selenium
7782-49-2
Se
AW 78-96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
file, porters
ESOX LUCIUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
429 Muscle	AAS		a) 19 b) 18	a) 1.1-3.0 mg/kg wet wt b) <0.20-0.62 mg/kg wet wt	a) 2.1 mg/kg wet wt b) Not applicable	a) Lake Dufault, Length 52.0-81.5 cm, wt 75-240 g b) Lake Dufault. Length 40.0-81.5 cm, wt 215-350 g Levels not related to size Collected summer '77. Canada, Quebec (N), Lake Dufault Canada, Quebec (N), Lake Dufault CANADA; MUSCLES; BIOACCUMULATION; FISHES; WATER POLLUTION; MERCURY; SELENIUM	Speyer, M.R. 1980 Bulletin of Environmental Contamination and Toxicology 24:427-432

Selenium
7782-49-2
Se
AW 78-96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C
Seal

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
430 Liver	GC		1	a) Not applicable b) Not applicable	a) 2924.6 ppb b) 594.8 ppb wet wt	a) Se II, IV b) Se VI Canada, Quebec (N), Inuit Eskimo Community	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98
431 Muscle	GC		1	a) Not applicable b) Not applicable	a) 167.2 ppb b) 123.2 ppb wet wt	a) Se II, IV b) Se VI Canada, Quebec (N), Inuit Eskimo Community	Cappon, C.J. Smith, J.C. 1981b Journal of Analytic Toxicology 5:90-98

Silver

7440-22-4
 Ag
 Ag 107.868, NP 960.5 C, BP 2000 C, VP 1 m Hg at 1310 C, 10 m Hg at 1540 C
 Clam, surf
SISIOLA SOLIDISSIMA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
4.32 Body, Whole	a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given		a) 2.1 + or - 0.80 b) 3.1 + or - 1.64 c) 6.0 + or - 2.65 d) 6.4 + or - 1.47 e) 10.3 + or - 2.98 f) 20.4 + or - 5.29 g) 1.4 + or - 0.70 h) 1.7 + or - 1.20 i) 0.75 + or - 0.51	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 43 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb g) Controls, 15 d h) Controls, 29 d i) Controls, 43 d	Ag-seawater solutions, a)-f) Controls, in seawater Shells removed before analysis	Graig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22: 633-647
						MILUS; CALCIUM; COPPER; SILVER; TRACE ELEMENTS; BIOACCUMULATION; ECO; COMPARATIVE EVALUATIONS; CONNECTICUT	

Silver

7440-22-4
 Ag
 Ag 107.868, NP 960.5 C, BP 2000 C, VP 1 m Hg at 1310 C, 10 m Hg at 1540 C
 Grouse, ruffed
BCNASSA UMBRIUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
4.33 Feathers	AAS	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	130	a) < 0.01 ug/g b) < 0.01 ug/g c) < 0.01 ug/g d) < 0.01 ug/g e) < 0.01 ug/g f) < 0.01 ug/g	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 82 birds, 1978-79 harvest dry wt	BIRDS; FEATHERS; JUVENILES; CADMIUM; COPPER; LEAF; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS	Scanlon, P.T. Oderwald, R.G. Dietrick, T.J. Coggins, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25: 947-949
						Virginia (SW)	

Silver
740-22-4

Ag 107.868, MP 960.5 C, BP 2000 C, VP 1 mm Hg at 1310 C, 10 mm Hg at 1540 C

Cysteine

CLASSOSTREA VIRGINICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
434 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 5.4 + or - 2.26 ppb b) 9.2 + or - 4.75 ppb c) 15.4 + or - 7.19 ppb d) 8.5 + or - 3.28 ppb e) 13.7 + or - 4.85 ppb f) 23.2 + or - 7.51 ppb g) 1.5 + or - 0.33 ppb h) 1.5 + or - 0.34 ppb i) 1.3 + or - 0.35 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 3 d, 10 ppb d) 29 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb Controls, 15 d Controls, 29 d Controls, 43 d Ag-seaater solutions, a)-f) Controls, in seawater Shells removed before analysis	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22: 643-647

Silver
740-22-4
Ag 107.868, MP 960.5 C, BP 2000 C, VP 1 mm Hg at 1310 C, 10 mm Hg at 1540 C
Cubog
ARCTICA ISLANDICA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
435 Body, whole			a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 4.5 + or - 2.00 ppb b) 2.7 + or - 1.38 ppb c) 3.5 + or - 1.93 ppb d) 4.7 + or - 2.16 ppb e) 5.0 + or - 2.57 ppb f) 5.1 + or - 2.45 ppb g) 2.7 + or - 1.15 ppb h) 3.2 + or - 1.90 ppb i) 2.5 + or - 1.51 ppb	a) 15 d, 10 ppb b) 29 d, 10 ppb c) 3 d, 10 ppb d) 15 d, 20 ppb e) 29 d, 20 ppb f) 43 d, 20 ppb Controls, 15 d Controls, 29 d Controls, 43 d Ag-seaater solutions, a)-f) Controls, in seawater Shells removed before analysis	Greig, R.A. 1979 Bulletin of Environmental Contamination and Toxicology 22: 643-647

Sulfanilamide, N(1)-(4,6-dimethyl-2-pyridyl)- (8 CI)
 Benzeneisoflourane, 4-amino-N-(4,6-diethyl-2-pyridinyl)- (9 CI)
 57-68-1
 C12-H14-N4-O2-S
 Mn 278.32, Mp 176 C (also reported: 178-179 C, 198-199 C, 205-207 C)
 Swine
 STS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
436 Adipose	Ingestion	Colorimetry	a) 3 b) 3 c) 3 d) 3 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 4.90 + or - 0.30 ppm b) 0.43 + or - 0.12 ppm c) 0.10 + or - 0.02 ppm d) 0.02 + or - 0.01 ppm e) 0.01 + or - 0.01 ppm	a) Last medication day b) Withdrawal day 2 c) Withdrawal day 4 d) Withdrawal day 6 e) Yorkshire-cross weanlings, wt 18.0-42.7 kg, on 500 g/ton of feed for 30 days for non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm.	Samuelson, G. Whipple, D.H. Showalter, D.H. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452
437 Blood, Plasma	Ingestion	Colorimetry	15	a) 22.6-35.2 ppm b) 23.3-36.8 ppm c) 20.2-25.4 ppm d) 15.4-23.4 ppm e) 7.1-20.3 ppm f) 2.2-9.5 ppm g) 0-2.0 ppm	a) 30.7 + or - 0.9 ppm b) 30.8 + or - 1.0 ppm c) 27.2 + or - 1.0 ppm d) 19.7 + or - 0.7 ppm e) 12.5 + or - 1.2 ppm f) 4.8 + or - 0.5 ppm g) 0.5 + or - 0.2 ppm	a) 0 hr b) 4 hr c) 8 hr d) 12 hr e) 24 hr f) 48 hr g) 72 hr Postmedication Yorkshire crosses-weanlings, wt 18.0-42.7 kg, on 500 g/ton of feed for 30 days for non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm.	Samuelson, G. Whipple, D.H. Showalter, D.H. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452
438 Kidney	Ingestion	Colorimetry	a) 3 b) 3 c) 3 d) 3 e) 3 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 16.07 + or - 0.67 ppm b) 1.86 + or - 0.46 ppm c) 0.22 + or - 0.07 ppm d) 0.16 + or - 0.06 ppm e) 0.08 + or - 0.05 ppm f) 0.01 + or - 0.01 ppm	a) Last medication day b) Withdrawal day 2 c) Withdrawal day 4 d) Withdrawal day 6 e) Withdrawal day 8 f) Withdrawal day 10 g) Yorkshire-cross weanlings, wt 18.0-42.7 kg, on 500 g/ton of feed for 30 days for non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm.	Samuelson, G. Whipple, D.H. Showalter, D.H. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452
439 Liver	Ingestion	Colorimetry	a) 3 b) 3 c) 3 d) 3 e) 3 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 16.27 + or - 0.91 ppm b) 2.01 + or - 0.40 ppm c) 0.37 + or - 0.10 ppm d) 0.05 + or - 0.03 ppm e) 0.12 + or - 0.08 ppm f) 0.06 + or - 0.02 ppm	a) Last medication day b) Withdrawal day 2 c) Withdrawal day 4 d) Withdrawal day 6 e) Withdrawal day 10 f) Yorkshire-cross weanlings, wt 18.0-42.7 kg, on 500 g/ton of feed for 30 days for non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm.	Samuelson, G. Whipple, D.H. Showalter, D.H. Jacobson, W.C. Heath, G.E. 1979 Journal of the American Veterinary Medical Association 175(5):449-452

Sulfanilamide, N(1)-[4,6-dimethyl-2-pyridinyl]- (8 CI)
 Benzanesulfonamide, 4-amin-N-(4,6-dimethyl-2-pyridinyl)- (9 CI)
 57-68-1
 C12-H14-N4-O2-S
 MR 278.32, MP 176 C (also reported: 178-179 C, 198-199 C, 205-207 C)
 Sine
 EC sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
440 Muscle	Ingestion	Colorimetry	a) 3 b) 3 c) 3 d) 3 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 5.77 + or ~ 0.37 b) 0.67 + or ~ 0.16 c) 0.09 + or ~ 0.02 d) 0.02 + or ~ 0.00 e) 0.02 + or ~ 0.01	a) Last medication day 2 b) Withdrawal day 4 c) Withdrawal day 6 d) Withdrawal day 8 e) Yorkhire-cross weanlings, wt 16.0-42.7 kg, on 500 g/s on of feed for 30 days Non-medicated pigs placed in pens of medicated ones have levels > 0.1 ppm. SULFONAMIDES; SWINE; BIOACCUMULATION; ADIPOSE TISSUE; BLOOD PLASMA; KIDNEYS; LIVER; MUSCLES; DRUGS; MARYLAND	Samuelson, G., Shippe, D. M., Showalter, D. H., Jacobson, W. C., Reath, G. E., Journal of the American Veterinary Medical Association 175(5):449-452

Thorium, isotope of mass 230
 14269-63-7
 1t
 MR 230
 Cattle
 EC sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
441 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.0004 PCl/g b) 0.0003 PCl/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes	Edwards, W.C., Dooley, A.L., 1980 Veterinary and Human Toxicology 22(5):309-311
442 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.0003 PCl/g b) 0.0002 PCl/g	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes	Edwards, W.C., Dooley, A.L., 1980 Veterinary and Human Toxicology 22(5):309-311

(NEXT PAGE)

Tiborius, isotope of mass 230
1469-63-7

Th

NN 230

Cattle

ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
443 Muscle	Ingestion AAS		a) 4 b) 4	a) Not given b) Not given	a) 0.0003 PC1/g b) 0.0004 PC1/g	a) Pastures fertilized with treated raffinate 6 mo on Flots treated with raffinate (100 lb N/Acre) or commercial fertilizer (100 lb N/Acre). Affilled 5/79 and 7/79 Black, white-faced calves, mean Pretest wt 337 lb, mean post-test wt 665 lb. No pathological changes	Edwards, W.C. Dooly, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311

Total DDT (No postings in CHEMLINE).

50-29-3

C18-R9-C15

N 35n.50

CRO

CCIVUS BRACHYRHYNCHOS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
444 Muscle			14	Not given	4.0 PPM wet wt (123 PPM lipid wt) Geometric mean	Sum of isomers and metabolites Lipid wt value exceeds 5 ppm tolerance for human consumption of domestic animals Collected near former DDT manufacturing plant nearly 10 yr after cessation of production. Alabama, Wheeler National Wildlife Refuge	O'Shea, T.J. Fleeting, W.J., III Comartie, E. 1980 Science 209:509-510

IMplied reproductive effects

FINDS: RABBITS; ALABAMA; BODY;

MUSCLES; BIOACCUMULATION; INDUSTRIAL

EWILUTION; LAND POLLUTION; PESTICIDE

RESIDUES; WATER POLLUTION; DDT

Total DDT (No postings in CHEMLINE)
 5-C-29-3
 C14-B9-C15
 EW 354-50
 Duck, Mallard
ANAS platyrhynchos

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
445 Body, whole			27	Not given	4.0 ppm wet wt (36.0 ppm lipid wt) Geometric mean	Sum of isomers and metabolites Lipid wt value exceeds 5 ppm tolerance for human consumption of domestic animals Collected near former DDT manufacturing plant nearly 10 yr after cessation of production. Alabama, Wheeler National Wildlife Refuge	O'Shea, T.J., Pleming, W.J., III Conarie, E. 1980 Science 209:509-510
						Implied reproductive effects	
446 Muscle			27	Not given	0.67 ppm wet wt (11.5 ppm lipid wt) Geometric mean	BIRDS: RABBITS: ALABAMA: BODY; MUSCLES; BIOTACCUMULATION; INDUSTRIAL EFFECT; LAND POLLUTION; PESTICIDE RESIDUES; WATER POLLUTION; DDT Alabama, Wheeler National Wildlife Refuge	O'Shea, T.J., Pleming, W.J., III Conarie, E. 1980 Science 209:509-510
						Implied reproductive effects	

Total DDT (No postings in CHEMLINE).
 5-C-29-3
 C14-B9-C15
 EW 354-50
 Rabbit, cottontail
Sylvilagus floridanus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
447 Muscle			4	Not given	0.27 ppm wet wt (21.7 ppm lipid wt) Geometric mean	Sum of isomers and metabolites Lipid wt value exceeds 5 ppm tolerance for human consumption of domestic animals Collected near former DDT manufacturing plant nearly 10 yr after cessation of production. Alabama, Wheeler National Wildlife Refuge	O'Shea, T.J., Pleming, W.J., III Conarie, E. 1980 Science 209:509-510

Total DDT (INC Postings in CHEMLINE) *

CC-29-3

C14-39-C15

EE 354, 50

Rabbit, swamp

SILVILAGUS AQUATICUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
448 Muscle			5	Not given	0.25 ppm wet wt (18.0 ppm lipid wt)	Sum of isomers and metabolites Lipid wt value exceeds 5 ppm geometric mean tolerance for human consumption of domestic animals	O'Shea, T.J., Tealings, W.J., III Cotariel, E. 1980 Science 209: 509-510

Toxaphene
8001-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
CALL, great black-backed
IBIS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
449 Eggs		GC	28	0.0-0.30 ppm wet wt	0.02 + or - 0.07 ppm wet wt	Ratcliffe under 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77.	Sparo, R.C., Coon, W.C., Kolbe, E., 1979 Bulletin of Environmental Containment and Toxicology 22: 394-399

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
						Maine, Appledore Island	Toxicology 22: 394-399

Toxaphene
600-1-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gull, herring
Larus argentatus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
450 2998	GC	a) 30 b) 28	a) 0.00-0.21 ppm b) 0.00-0.19 ppm wet wt	a) 0.01 + or - 0.05 ppm b) 0.03 + or - 0.05 ppm wet wt	a) Ratcliffe index 1.53-1.98, shell thickness 0.33-0.47 mm, shell wt 5.07-7.9 g, lipid content 6.10-10.20% b) Ratcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.54 g, 6.6-2.9-7% Collected 5/77.	a) Ratcliffe index 1.53-1.98, shell thickness 0.33-0.47 mm, shell wt 5.07-7.9 g, lipid content 6.10-10.20% b) Ratcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.54 g, 6.6-2.9-7% Collected 5/77.	Szaro, R.C. Coon, W.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

Toxaphene
600-1-35-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Swine
SUS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
451 Blood, serum	Ingestion		1	Not given	0.3 ppm	Accidental contamination of food by insecticide spray (45% toxaphene and 2% lindane). Slobbering, vomiting, muscle tremors, staggering, periodic convulsions. Death 2 hr after onset of symptoms.	Mount, M.E. Traffis, V. Milleret, R.J. Oehme, F.W. 1980 Journal of the American Veterinary Medical Association 177(9):445-447
452 Brain	Ingestion		1	a) Not given b) Not given	a) 2.0 ppm b) 4.0 ppm	Slobbering, vomiting, muscle tremors, staggering, periodic convulsions. Death 2 hr after onset of symptoms.	Mount, M.E. Traffis, V. Milleret, R.J. Oehme, F.W. 1980 Journal of the American Veterinary Medical Association 177(9):445-447

Uranium
7440-61-1
Atw 238.029, MP 1132 C, BP 3818 C, VP 100 mm Hg at 3270 C
Cattle
ECS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
453 Blood	Ingestion	AAS	20	a) < 0.0005-0.005 ppm b) < 0.0005-0.005 ppm c) < 0.0005-0.004 ppm d) 0.0005-0.05 ppm	a) 0.0022 ppm b) 0.0013 ppm c) 0.008 ppm d) 0.0072 ppm	d) Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, first-test c) Controls, pre-test d) Controls, post-test treated with Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean Pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
				No Pathological changes		CATTLE: RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	
454 Kidney	Ingestion	AAS	4	a) Not given b) Not given	a) 0.017 ppm b) 0.002 ppm Net wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean Pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
				No Pathological changes		CATTLE: RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	
455 Liver	Ingestion	AAS	4	a) Not given b) Not given	a) 0.002 ppm b) 0.004 ppm Net wt	a) Pastures fertilized with treated raffinate b) Controls Grazing 6 mo on plots treated with raffinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean Pre-test wt 337 lb, mean post-test wt 665 lb.	Edwards, W.C. Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):309-311
				No Pathological changes		CATTLE: RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	

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ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
456 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 0.003 ppm b) 0.001 ppm Net wt	e) Pastures fertilized with treated raffinate f) Controls Grazing 6 ac on plots treated with raffinate (100 lb/ac) or commercial fertilizer (100 lb/ac). - Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes	Edwards, W.C. Dooley, A.J. 1980 Veterinary and Human Toxicology 22(5):309-311

Orea, 3-(3,4-dichlorophenyl)-1,1-dimethyl- (8 CI)
Orea, N-(3,4-dichlorophenyl)-N,N-dimethyl- (9 CI)
330-51-1
C5-B10-C12-N>0
EW 233.10, MF 158-159 C
Cattle
ECS sp.

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
457 Blood	Colorimetry		a) 1 b) 1 c) 1 d) 1	a) Not given b) Not given c) Not given d) Not given	a) 4.85 + or - 0.93% b) 2.98 + or - 0.64% c) 2.50 + or - 0.57% d) 2.16 + or - 0.59%	a) At 5 ppm b) At 10 ppm c) At 25 ppm d) At 50 ppm Daily diet levels for 33 days Reticulin cows, ages 4-6 yr	Kalra, S.K. Chatal, K.S. 1979 Ecotoxicology and Environmental Safety 3:362-368
458 Urine	Ingestion	Colorimetry	4		a) 33.48 + or - 2.75% b) 26.24 + or - 3.53% c) 37.71 + or - 6.82% d) 7.50 + or - 0.63% e) 21.35 + or - 2.88% f) 43.95 + or - 2.42% g) 6.05 + or - 1.39% h) 23.36 + or - 2.11%	a) At 5 ppm b) At 10 ppm c) At 25 ppm d) At 25 ppm (excreted as 3-(3,4-dichlorophenyl)-1-methylurea) e) At 25 ppm (excreted as 3-(3,4-dichlorophenyl)urea) f) At 50 ppm (excreted as 3-(3,4-dichlorophenyl)-1-methylurea) g) At 50 ppm (excreted as 3-(3,4-dichlorophenyl)urea) h) At 50 ppm (excreted as 3-(3,4-dichlorophenyl)urea) Daily diet levels for 33 days Holstein cows, ages 4-6 yr	Kalra, S.K. Chatal, K.S. 1979 Ecotoxicology and Environmental Safety 3:362-368

Zinc

7440-66-6
2_n
ATW 65.38. MP 419.5 C. BP 908 C. VP 1 mm Hg at 487 C. 10 mm Hg at 590 C
Antelope, Pronghorn
ANTilocapra AMERICANA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
459 Kidney	AAS	21	Not given	96.5 + or - 9 g/g dry wt.	96.5 + or - 9 g/g dry wt.	Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; IRON; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832
460 Liver	AAS	20	Not given	84.8 + or - 28.4 ug/g dry wt.	84.8 + or - 28.4 ug/g dry wt.	Montana, Northern Great Plains DEER; ANTELOPE; MONTANA; KIDNEYS; LIVER; BIOACCUMULATION; CADMIUM; COPPER; IRON; MANGANESE; METALS; MOLYBDENUM; NICKEL; ZINC	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22:827-832

Zinc

7440-66-6
2_n
ATW 65.38. MP 419.5 C. BP 908 C. VP 1 mm Hg at 487 C. 10 mm Hg at 590 C
Tueell
LEUCIS MACCCHIRIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
461 Body, whole	AAS	61	Not given	108 ug/g	108 ug/g	Fishes, mean length 95 mm, mean dry wt 16.40 g, collected downstream of flood control weir at Algonquin. Major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. Concentration inversely related to fish wt.	Vinikour, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Illinois, Poi River

ILLINOIS; POI; BIOACCUMULATION;
FISHES; WATER POLLUTION; CADMIUM;
COPPER; IRON; METALS; ZINC

ZINC
7440-66-6

2n
ATW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Fullhead, black
ICTALURUS NEIAS

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
462 Body, whole	AAS	10	Not given	94.8 ug/g		Fishes, mean length 172 mm, mean dry wt 41.59 g, collected downstream of flood control weir at Algonquin. Major industrial effluent, metal input mainly from sewage treatment plants and recreational boating. Concentration inversely related to air h.	Vinokur, H. S., Goldstein, R.H., Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

ZINC
7440-66-6
2n
ATW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Cattle
ECS sp.

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
463 Blood, serum	Ingestion	AAS	20	a) 1.25-3.05 ppm b) 1.9-2.97 ppm c) 1.55-2.95 ppm d) 1.7-3.3 ppm	a) 1.97 ppm b) 2.30 ppm c) 1.97 ppm d) 2.4 ppm	Pastures fertilized with treated raffinate, pre-test b) Pastures fertilized with treated raffinate, post-test c) Controls, pre-test d) Controls, post-test Grazing 6 acre plots treated with raffinate (100 lb N/Acre) or commercial fertilizer (100 lb N/Acre). AF Field 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 665 lb. No pathological changes	Edwards, W.C., Dooley, A.L. 1980 Veterinary and Human Toxicology 22(5):303-311
464 Bone	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 86 + or - 3.5 ppm b) 71 + or - 6.5 ppm dry wt	a) Control diet b) Diet of 12% high Cd sewage sludge. Perfused, rearing, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE; SLUDGES; COLORADO; BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CALCIUM; COFFER; LEAD; MERCURY	Johnson, D.E., Kienholz, E.W., Batter, J.C., Spangler, E., Kard, G. 1981 Journal of Animal Science 52(1):108-114

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ZINC
7440-66-6
2N
AT 65-38. MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Cattle
ECS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION		REFERENCE
					MEAN		
465 Brain	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 32 + or - 3.3 ppm b) 41 + or - 6.6 ppm Dry wt	a) Control diet of 12% high Cd sewage sludge. b) Diet of 12% high Cd sewage sludge. Harrow Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. 1981 CATTLE; SLUDGES; COLORADO; BCNES; EPAINI; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienhoiz, E.W. Baxter, J.C. Spangler, E. Hart, G.H. 1979 Journal of the Science of Food and Agriculture 30:503-507
466 Kidney	Ingestion	AAS	190	12.9-31.6 ppm wet wt	18.6 + or - 2.8 ppm wet wt	Samples from 8 widely separated regions. Significant differences between regions and within the same region. Australia, New South Wales	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507
467 Kidney	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 93 + or - 6 ppm b) 96 + or - 5 ppm Dry wt	a) Control diet of 12% high Cd sewage sludge. b) Diet of 12% high Cd sewage sludge. Harrow Yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. 1981 CATTLE; SLUDGES; COLORADO; BONES; EPAINI; KIDNEYS; LIVER; LUNGS; MUSCLES; SPLEEN; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienhoiz, E.W. Baxter, J.C. Spangler, E. Hart, G.H. 1979 Journal of the Science of Food and Agriculture 30:503-507
468 Kidney	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 19.20 ppm b) 18.27 ppm Wet wt	a) Pastures fertilized with treated rafinate b) Controls Grazing on plots treated with rafinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Affiled 5/9 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 655 lb.	Edwards, W.C. Doolley, A.L. 1980 Veterinary and Human Toxicology 22 (5):309-311
469 Liver	Ingestion	AAS	190	13.4-99.2 ppm wet wt	37.5 + or - 13.4 ppm wet wt	HC pathological changes CATTLE; RAFFINATE; RADIUM 226; TIGORT 230; ARSENIC; CADMIUM; COOPER; LEAD; MOLIBDENUM; NICKEL; CADMIUM; ZINC; BIOACCUMULATION; OILMOMA; BLOOD; BLOOD SERUM; KIDNEYS; LIVER; MUSCLES	Flanjak, J. Lee, H.Y. 1979 Journal of the Science of Food and Agriculture 30:503-507

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TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
470 Liver	Ingestion	AAS	a) 6 b) 6	a) Not given b) Not given	a) 103 + or - 0.9 ppm b) 132 + or - 12 ppm Dry wt	a) Control diet b) Diet of 1% high Cd sewage sludge. Bereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt. CATTLE: SLUDGES; COLORADO: BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPINE; BIOACCUMULATION; CADDIUS; COPPER; LEAD; MERCURY	Johnson, D.E., Kienholz, E.W., Baxter, J.C., Spanier, Z., Ward, G.H., 1981 Journal of Animal Science 52(1):108-114
471 Liver	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 33.92 ppm b) 42.65 ppm wt/vt	a) Pastures fertilized with treated rafinate b) Controls Grazing 6 mo on plots treated with rafinate (100 lb N/acre) or commercial fertilizer (100 lb N/acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 465 lb.	Edwards, W.C., Dooly, A.L., 1980 Veterinary and Human Toxicology 22(5):309-311
						WC Pathological changes	
						CATTLE: RAFFINATE; RADIUM 226; THORIUM 230; ARSENIC; CADMIUM; COPPER; LEAD; MOLYBDENUM; NICKEL; URANIUM; ZINC; BIOACCUMULATION; OKLAHOMA: BLOOD; BLOOD SERUM; RIDEYES; LIVER; MUSCLES	
472 Lung	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 95 + or - 2.7 ppm b) 96 + or - 2.0 ppm Dry wt	a) Control diet b) Diet of 1% high Cd sewage sludge. Bereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E., Kienholz, E.W., Baxter, J.C., Spanier, Z., Ward, G.H., 1981 Journal of Animal Science 52(1):108-114
						CATTLE: SLUDGES; COLORADO: BONES; BRAIN; KIDNEYS; LIVER; LUNGS; MUSCLES; SPINE; BIOACCUMULATION; CADDIUS; COPPER; LEAD; MERCURY	
473 Muscle	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 340 + or - 10 ppm b) 267 + or - 28 ppm Dry wt	a) Control diet of 1% high Cd sewage sludge. b) Diet of 1% high Cd sewage sludge. Bereford yearlings, mean wt 336 kg. Slaughtered at 460 kg mean live wt.	Johnson, D.E., Kienholz, E.W., Baxter, J.C., Spanier, Z., Ward, G.H., 1981 Journal of Animal Science 52(1):108-114

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ZINC
7440-66-6
2n
ATW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 467 C, 10 mm Hg at 590 C
Cattle
PCS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
474 Muscle	Ingestion	AAS	a) 4 b) 4	a) Not given b) Not given	a) 36.10 ppm b) 55.72 ppm Net wt	e) Pastures fertilized with treated fertilizer b) Controls Grazing 6 mo on plots treated with fertilizer (100 lb /acre) or commercial fertilizer (100 lb /acre). Applied 5/79 and 7/79 Black, white-faced calves, mean pre-test wt 337 lb, mean post-test wt 66 lb. bc Pathological changes	Edwards, W.C. Dooley, A.J. 1980 Veterinary and Human Toxicology 22(5):309-311
475 Spleen	Ingestion	AAS	a) 3 b) 3	a) Not given b) Not given	a) 117 + or - 3.3 ppm b) 110 + or - 0 ppm Dry wt	a) Control diet b) Diet of 1% high Cd sewage sludge, Beeford yearlings, mean wt 336 kg; Slaughtered at 460 kg mean live wt; CATTLE: SLUDGES; COLCHADO; BONES; FRIJIL; KILNISH; LIVER; JUNGS; BUCLES; SPINE; BIOACCUMULATION; CADMIUM; COPPER; LEAD; MERCURY	Johnson, D.E. Kienholtz, E.W. Parker, J.C. Spangler, E. Ward, G.M. 1981 Journal of Animal Science 52(1):108-114

ZINC
7440-66-6
2n
ATW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 467 C, 10 mm Hg at 590 C
Crappie, black
FAGROIS NIGROCAULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
476 Body, whole		AAS	26	Not given	113 ug/g	Fishes, mean length 109 mm, mean dry wt 18.09 g, collected downstream of flood control weir at Longview, Ne sion industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No concentration change with increasing fish wt.	Vinkour, W.S. Goldstein, R.M. Anderson, R.W. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734
						Illinois, Fox River	
						ILLINOIS: RIVER; BIOACCUMULATION; FISHES; WATER POLLUTION; CADMIUM; COPPER; LEAD; METALS; ZINC	

Zinc
7440-66-6

Zn
At 65.38, BP 419.5 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Teer, male
Crocotilus hemionus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
477 Kidney	AAS		24	Not given	97.4 + or - 16.2 ug/g dry wt	Agess < 10-85 yo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832
478 Liver	AAS		30	Not given	113.3 + or - 24.6 ug/g dry wt	Agess < 10-85 yo, assumed healthy. Vegetation analysis indicates pristine area free from gross pollution.	Munshower, F.F. Neuman, D.R. 1979 Bulletin of Environmental Contamination and Toxicology 22: 827-832

Zinc
7440-66-6
Zn
At 65.38, BP 419.5 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Grouse, ruffed
Pterocles umbellus

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
479 Feathers	AAS		130	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 97 + or - 9 ug/g b) 90 + or - 5 ug/g c) 98 + or - 8 ug/g d) 84 + or - 5 ug/g e) 82 + or - 3 ug/g f) 112 + or - 14 ug/g dry wt	a) 77 adults b) 53 juveniles c) 88 males d) 42 females e) 82 birds, 1977-78 harvest f) 47 birds, 1978-79 harvest Birds shot by hunters in remote forest areas. Significantly higher levels (P<0.01) during 1978-79 season.	Scanlon, P.P. Oderwald, R.G. Dietrick, T.J. Coughlin, J.L. 1980 Bulletin of Environmental Contamination and Toxicology 25: 947-949

Zinc
7440-66-6
Zn
At 65.38, BP 419.5 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Virginia (SW)

BIRDS: FEATHERS: JUVENILES; CADMIUM; COPPER; LEAD; NICKEL; SILVER; ZINC; VIRGINIA; ADULTS

Zinc
7440-66-6
2n
At 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Ferch, Yellow
FIRCA FLAVISENS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
480 Body, whole	Ingestion AAS		40	Not given	106 ug/g	Fishes, mean length 104 mm, mean dry wt 11.22 g, collected downstream of flooded control weir at Algonquin, N.C. Major industrial effluents, metal input mainly from sewage treatment plants and recreational boating. No environmental contamination and toxicological change with increasing fish wt.	Vinhikur, W.S. Goldstein, R.M. Anderson, R.V. 1980 Bulletin of Environmental Contamination and Toxicology 24:727-734

Zinc
7440-66-6
2n
At 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
CVIS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
481 Bone	Ingestion ASV		a) 9 b) 5	a) Not given b) Not given	a) 662 + or - 39 ppm b) 625 + or - 58 ppm DRY WT	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric ton/hectare of municipal sewage sludge for 274 days	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoersand, G.S. Haschek, W.H. Telford, J.N. Furt, A.K. Parkinson, T.F. Bache, C.A. Gutermann, V.H. Wzolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
482 Brain	Ingestion ASV		a) 9 b) 5	a) Not given b) Not given	a) 58 + or - 2 ppm b) 53 + or - 3 ppm DRY WT	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed silage corn grown on soil amended with 280 dry metric ton/hectare of municipal sewage sludge for 274 days	Heffron, C.L. Reid, J.T. Elfving, D.C. Stoersand, G.S. Haschek, W.H. Telford, J.N. Furt, A.K. Parkinson, T.F. Bache, C.A. Gutermann, V.H. Wzolek, P.C. Lisk, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

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Tissue	Exposure Route	Analytical Method	Number of Casus	Range	General Information		Reference
					Mean	SD	
483 Heart	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	3) 59 + or - 2 ppm b) 54 + or - 7 ppm dry wt	3) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed sludge corn grown on soil amended with 200 dry metric tons/hectare of municipal sewage sludge for 274 days	Heffron, C.L. Reid, J.T. Elving, D.C. Stewmand, G.S. Hasche, W.M. Teiford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wzolek, P.C. List, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
484 Kidney	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 4135 + or - 253 ppm b) 3271 + or - 402 ppm dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed sludge corn grown on soil amended with 200 dry metric tons/hectare of municipal sewage sludge for 274 days	Heffron, C.L. Reid, J.T. Elving, D.C. Stewmand, G.S. Hasche, W.M. Teiford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wzolek, P.C. List, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61
485 Liver	Ingestion	ASV	a) 9 b) 5	a) Not given b) Not given	a) 1627 + or - 161 ppm b) 1523 + or - 261 ppm dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lambs fed sludge corn grown on soil amended with 200 dry metric tons/hectare of municipal sewage sludge for 274 days	Heffron, C.L. Reid, J.T. Elving, D.C. Stewmand, G.S. Hasche, W.M. Teiford, J.N. Furr, A.K. Parkinson, T.F. Bache, C.A. Gutenmann, W.H. Wzolek, P.C. List, D.J. 1980 Journal of Agricultural and Food Chemistry 28:58-61

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21.DC
1440-66-6
2n Atw 65.38. MP 419.5 C. BP 908 C. VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Sheep
CVIS sp.

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	GENERAL INFORMATION	
					MEN	REFERENCE
486 Muscle	Ingestion	AST	14	a) Not given b) Not given c) Not given d) Not given	a) 151 + or - 7 ppm b) 117 + or - 5 ppm c) 108 + or - 3 ppm d) 95 + or - 20 ppm Dry wt	a) Animals fed sludge-grown crop, 9 samples (chuck) b) Animals fed sludge-grown crop, 9 samples (round) c) Animals fed control crop, 5 samples (chuck) d) Sheep fed control crop, 5 samples (round) Lamb fed sludge corn grown on soil assayed with 280 dry metric tons/hectare of municipal sewage sludge for 274 days Significantly higher levels ($P < 0.05$) in sludge-fed animals New York, Syracuse
						SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; ECES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSISES
						Liver cell degeneration in sheep fed sludge-grown corn silage
487 Spleen	Ingestion	AST	a) 9 b) 5	a) Not given b) Not given	a) 98 + or - 3 ppm b) 102 + or - 10 ppm Dry wt	a) Animals fed sludge-grown crop b) Animals fed control crop Lamb fed sludge corn grown on soil assayed with 280 dry metric tons/hectare of municipal sludge for 274 days New York, Syracuse
						Liver cell degeneration in sheep fed sludge-grown corn silage
						SHEEP; JUVENILES; SLUDGES; ANIMAL FEED; BIOACCUMULATION; CADMIUM; ZINC; ECES; BRAIN; HEART; KIDNEYS; LIVER; MUSCLES; SPLEEN; NEW YORK; AUTOPSISES
						Liver cell degeneration in sheep fed sludge-grown corn silage

Zinc
7440-66-6
Zn
Atv 65.3B, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C
Swan, Muse
CIGUS OIOR

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CLASSES	RANGE		MEAN		GENERAL INFORMATION		
				a)	b)	a)	b)	a)	b)	
488 Kidney	Ingestion	AAS	4) 18 5) 11	a) 145-475 ug/g Dry wt b) 60-235 ug/g		a) 300 ug/g Dry wt b) 145 ug/g		a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, Central Nottingham Area. Gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands.		Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18: 187-202
										United Kingdom, River Trent
										Anormal carriage of neck, anorexia, Paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss.
										FIELDS: SWANS: UNITED KINGDOM; LEAD POISONING; BONES: BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION
489 Liver	Ingestion	AAS	4) 18 5) 11	a) 240-1600 ug/g Dry wt b) 120-435 ug/g		a) 725 ug/g Dry wt b) 257 ug/g		a) Poisoned swans b) Controls Dead or dying birds in heavily fished area, Central Nottingham Area. Gizzard content, 11 fishing shots/bird. Controls, dead from other causes, East Midlands.		Simpson, V.R. Hunt, A.E. 1979 Environmental Pollution 18: 187-202
										United Kingdom, River Trent
										Anormal carriage of neck, anorexia, Paresis, increased pigmentation of liver, grossly extended gallbladder, gizzard and proventriculus impaction, kidney abnormalities, adrenal gland enlargement, weight loss.
										FIELDS: SWANS: UNITED KINGDOM; LEAD POISONING; BONES; BRAIN; KIDNEYS; LIVER; SPLEEN; COPPER; IRON; LEAD; ZINC; BIOACCUMULATION

1^a,3^a,4^a-Rethene-1H-cyclobuta [cd] pentaiene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-
 2,3,85-85-5
 C10-C112
 MW 545.6. MP 485 C. VP 6X10^(±6) mm Hg at 50 C
 Craftfish
 EROCALMABUS CLARK

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
490 Brain	Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.05 + or - 0.03 ppm b) 0.4 + or - 0.8 ppm c) 0.06 + or - 0.03 ppm d) 5.9 + or - 2.9 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-12 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Hirex Adults	Minchen, C.D. Hunsinger, R.N. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526	
491 Digestive gland	Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 1.7 + or - 0.6 ppm b) 4.6 + or - 1.7 ppm c) 1.4 + or - 0.9 ppm d) 7.8 + or - 2.0 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-12 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Hirex Adults	Minchen, C.D. Hunsinger, R.N. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526	
492 Gills	Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.7 + or - 0.2 ppm b) 0.8 + or - 0.1 ppm c) 1.1 + or - 0.1 ppm d) 1.7 + or - 0.3 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-12 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Hirex Adults	Minchen, C.D. Hunsinger, R.N. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526	
						Adults	Adults

1,3,4-Benthenc-1B-Cyclobuta (cd) Pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-
235-55-5
C10-C12
EW 545-6, MP 495 C, VP 6110 (F-6) mm Hg at 50 C
Crayfish
PROCARBUS CLARKI

(CONTINUED)

Tissue	Exposure Route	Analytical Method	Number of Cases	Range	General Information				Reference
						SD	N		
493 Green gland	Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.18 + or - 0.04 b) 1.8 + or - 0.4 ppm c) 0.2 + or - 0.6 ppm d) 5.6 + or - 1.4 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-11 d, after onset of late toxicosis symptoms c) 74 ppb dose or 24 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirer Adults				Minchew, C.D. Hunsinger, R.N. Giles, R.C. 1960 Bulletin of Environmental Contamination and Toxicology 24:522-526
					Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs of position, death.				
					NERVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIACCUMULATION; PESTICIDE RESIDUE; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES				
494 Intestine	Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 7.8 + or - 3.2 ppm b) 1.9 + or - 0.7 ppm c) 11.2 + or - 5 ppm d) 3.2 + or - 0.8 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 24 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirer Adults				Minchew, C.D. Hunsinger, R.N. Giles, R.C. 1960 Bulletin of Environmental Contamination and Toxicology 24:522-526
					Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs of position, death.				
					NERVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIACCUMULATION; PESTICIDE RESIDUE; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES				
495 Muscle	Radiometry	a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.04 + or - 0.01 b) 0.6 + or - 0.1 ppm c) 0.05 + or - 0.02 ppm d) 0.6 + or - 0.2 ppm	a) 7.4 ppb dose for 4-7 d, after onset of early toxicosis symptoms b) 7.4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 24 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirer Adults				Minchew, C.D. Hunsinger, R.N. Giles, R.C. 1960 Bulletin of Environmental Contamination and Toxicology 24:522-526
					Early toxicosis symptoms: eye twitch and body jerk. Late toxicosis symptoms: loss of control of tail reflexes, tumbling backwards in legs of position, death.				
					NERVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIACCUMULATION; PESTICIDE RESIDUE; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEUROMUSCULAR DISEASES; BRAIN; INTESTINES; MUSCLES				

(NEXT PAGE)

1,3,4,4-Methenec-1H-cyclobuta (cd) Pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

2385-85-5

C10-Cl12 MW 505.6, MP 485 C, VP 6x10 (E-6) mm Hg at 50 C

Crayfish
CROCAERUS CLARKI

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
496 Nerve	Radiometry		a) 7 b) 6 c) 6 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.04 + or - 0.02 ppm b) 0.1 + or - 1.0 ppm c) 0.04 + or - 0.07 ppm d) 6.2 + or - 3.2 ppm	a) 7-4 ppt dose for 4-7 d, after onset of early toxicosis symptoms b) 7-4 ppb dose for 10-21 d, after onset of late toxicosis symptoms c) 74 ppb dose for 2-4 d, after onset of early toxicosis symptoms d) 74 ppb dose for 7-14 d, after onset of early toxicosis symptoms Measured as C14-Mirex Adults	Minchew, C.J. Hunsinger, R.N. Giles, R.C. 1980 Bulletin of Environmental Contamination and Toxicology 24:522-526

Early toxicosis symptoms: eye twitch and body jer. Late toxicosis symptoms: loss of control of tail reflexes, tailing backwards in legs w/ position, death.

NERVES; GREEN GLAND; GILLS; DIGESTIVE GLAND; CRAYFISH; BIOACCUMULATION; FESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; MISSISSIPPI; ADULTS; NEURODUCUL DISEASES; BRAIN; INTESTINES; MUSCLES

1,3,4,4-Methenec-1H-cyclobuta (cd) Pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-

2385-85-5

C10-Cl12 MW 505.6, MP 485 C, VP 6x10 (E-6) mm Hg at 50 C

Crocodile, American
CROCODILUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
497 Eggs	GC-EC		a) 3 b) 3 c) 2 d) 3	a) Not given b) Not given c) Not given d) Not given	a) 0.02 ppm b) 0.01 ppm c) 0.02 ppm d) 0.01 ppm wt/vt	4 clutches Shells, membranes removed. Mean shell thickness 0.49 mm Florida, Everglades National Park	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23: 87-90

Eggs; CROCODILES, REPTILES; FLORIDA; MARYLAND; CHLORINE ORGANIC COMPOUNDS; DDE; DDT; Dieldrin; Heptachlor; Heptachlorone; Oxychlordane; Trichlorinated Ethylene;

BIOACCUMULATION; WATER POLLUTION

1,3,4-Metheno-1H-cyclobuta[cd] pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C12
MW 545.6, MP 405 C, VP 6X10⁻⁶ mm Hg at 50 C
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
498 Eggs	GC	28	0.0-0.26 ppm wet wt	0.02 + or - 0.06 ppm wet wt	Batchiffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%.	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22: 394-399	

1,3,4-Metheno-1H-cyclobuta[cd] pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2385-85-5
C10-C12
MW 545.6, MP 405 C, VP 6X10⁻⁶ mm Hg at 50 C
Herring
Menkey

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
499 Adipose	GLC	92-99%		95.3 + or - 3.2%	% recovery for concentration range 0.05-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.017 F.P.	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305	
500 Blood, Plasma	GLC	93-101%		95.7 + or - 3.5%	% recovery for concentration range 0.01-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.01 F.P.	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305	
501 Liver	GLC	93-104%		96.5 + or - 5.0%	% recovery for concentration range 0.10-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.03 F.P.	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23:300-305	

1,3,4,5-Metheno-1H-cyclobutene (cd) pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-
2305-05-5
C10-C12
MW 545.6, MP 485 C, VP 6X10(E-6) am Hg at 50 C
House
HCS sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	GENERAL INFORMATION		REFERENCE
				RANGE	MEAN	
502 Adipose		GLC	90-102%	98.6 + or - 4.9%	% recovery for concentration range 0.005-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.017 ppm.	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23: 300-305
503 Blood, Plasma		GLC	93-107%	97.8 + or - 6.1%	% recovery for concentration range 0.005-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.01 ppm.	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23: 300-305
504 Liver		GLC	94-102%	98.1 + or - 6.5%	% recovery for concentration range 0.01-1.0 ug Detection limit 0.2 pg Sensitivity of method 0.03 ppm.	Stein, V.B. Pittman, K.A. 1979 Bulletin of Environmental Contamination and Toxicology 23: 300-305

1,3,4,5-Metheno-1H-cyclobutene (cd) pentalene, 1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachlorooctahydro-
2305-05-5
C10-C12
MW 545.6, MP 485 C, VP 6X10(E-6) am Hg at 50 C
TURTLE, box
TERRAPENZ CAROLINA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	GENERAL INFORMATION		REFERENCE
				RANGE	MEAN	
505 Eggs		GC-EC	a) 6 b) 3 c) 1 d) 5	a) 1.4 ppm b) 1.6 ppm c) 2.5 ppm d) 1.4 ppm Dry wt	a) 1970 b) 1972 c) 1974 d) 1975 Collected from area sprayed with 5% kicker bait to control fire ants, Applications 10/68, 5/69, 10/69 and 5/70.	Holcomb, C.H. Parker, W.S. 1979 Bulletin of Environmental Contamination and Toxicology 23: 369-371

Mississippi, Lowndes County
EGGS; REPTILES; TURTLES; MISSISSIPPI;
ADULTS; LIVESTOCK; BIOACCUMULATION;
PESTICIDE RESIDUES; CHLORINE ORGANIC
COMPOUNDS

(NEXT PAGE)

1,3,4-Metheno-1H-cyclobuta(cd) pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2,3B-85-5
C10-C12
MW 545.6, MP 485 C,
Turtle, Alder
CHRYSEMY'S SCRIPTA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
506 Liver	GC-BC	a) 6 b) 3 c) 1 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 2.7 PPM b) 4.1 PPM c) 3.0 PPM d) 0.68 PPM Dry wt	a) 1970 b) 1972 c) 1974 d) 1975 Adults collected from area sprayed with mixer bait to control fire ants. Applications 10/68, 5/69, 10/69 and 5/74.	Holcomb, C.M. Parker, W.S. 1979 Bulletin of Environmental Contamination and Toxicology 23:369-371	

1,3,4-Metheno-1H-cyclobuta(cd) pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro-
2,3B-85-5
C10-C12
MW 545.6, MP 485 C,
Turtle, Alder
CHRYSEMY'S SCRIPTA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
507 Eggs	GC-BC	a) 2 b) 3 c) 4 d) 9 e) 6	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1.8 PPM b) 2.2 PPM c) 0.15 PPM d) 0.16 PPM e) 0.04 PPM Dry wt	a) 1970 b) 1972 c) 1974 d) 1975 e) 1977 Adults collected from area sprayed with 5% mixer bait to control fire ants. Applications 10/68, 5/69, 10/69 and 9/74.	Holcomb, C.M. Parker, W.S. 1979 Bulletin of Environmental Contamination and Toxicology 23:369-371	
508 Liver	GC-BC	a) 2 b) 3 c) 4 d) 9 e) 6	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.98 PPM b) 2.1 PPM c) 0.39 PPM d) 0.12 PPM e) 0.01 PPM Dry wt	a) 1970 b) 1972 c) 1974 d) 1975 e) 1977 Adults collected from area sprayed with 5% mixer bait to control fire ants. Applications 10/68, 5/69, 10/69 and 9/74.	Holcomb, C.M. Parker, W.S. 1979 Bulletin of Environmental Contamination and Toxicology 23:369-371	

1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-dechlorooctahydro-
1H-5a-O
C10-C11-O
MW 490.68, VP <3X10^(E-7) mg at 25 C
Bluefish
FCHAONUS SALTATRIX

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
509 Muscle	GC		1	a) Not applicable b) Not applicable c) Not applicable	a) 0.590 ppb b) 0.045 ppb c) < 1 ppb	a) Kepone b) Monohydrc-Kepone c) Dihydrc-Kepone Collected 1976/77	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5): 1035-1037

1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-dechlorooctahydro-
1H-5a-O
C10-C11-O
MW 490.68, VP <3X10^(E-7) mg at 25 C
Crab
CALLINECTES SAPIDUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
510 Muscle	GC		2	a) 0.634-1.36 ppb b) 0.018-0.09 ppb c) Not applicable	a) 0.997 ppb b) 0.070 ppb c) < 1 ppb	a) Kepone b) Monohydrc-Kepone c) Dihydrc-Kepone Collected 1976/77	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5): 1035-1037

1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-dechlorooctahydro-
1H-5a-O
C10-C11-O
MW 490.68, VP <3X10^(E-7) mg at 25 C
Cracker
MICROPOGON UNDULATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
511 Muscle	GC		6	a) 0.066-0.726 ppb b) 0.008-0.057 ppb c) Not applicable	a) 0.431 ppb b) 0.029 ppb c) < 1 ppb	a) Kepone b) Monohydrc-Kepone c) Dihydrc-Kepone Collected 1976/77	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5): 1035-1037

LICHENATION; MUSCLES; MEASUREMENT
METHODS; VIRGINIA; BIOACCUMULATION;
FISHES; PESTICIDE RESIDUES; WATER
ELUTION; CHLORINE ORGANIC COMPOUNDS

LICHENATION; MUSCLES; MEASUREMENT
METHODS; VIRGINIA; BIOACCUMULATION;
FISHES; PESTICIDE RESIDUES; WATER
ELUTION; CHLORINE ORGANIC COMPOUNDS

1,3,4-Metheno-2H-Cyclobuta(cd)Pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-dechlorooctahydro-
 14-50-0
 C10-C110-O
 BW 490.68, VP <3X10 (E-7) ■■■ Bq at 25 C
 Bullet
 EGUIL sp.

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
512 Muscle	GC		2	a) 0.100-0.534 ppm b) 0.010-0.035 ppm c) Not applicable	a) 0.317 ppm b) 0.023 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 EXCHLORINATION: MUSCLES: MEASUREMENT METHODS: VIRGINIA; BIOACCUMULATION: FISHES: PESTICIDE RESIDUES; WATER EFFECTION: CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,3,4-Metheno-2H-Cyclobuta(cd)Pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-dechlorooctahydro-
 14-50-0
 C10-C110-O
 BW 490.68, VP <3X10 (E-7) ■■■ Bq at 25 C
 Sot
 LIGSTROMUS LANTHURUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
513 Muscle	GC		3	a) 0.235-0.670 ppm b) 0.020-0.040 ppm c) Not applicable	a) 0.505 ppm b) 0.031 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 Virginia, James River Chesapeake Bay EXCHLORINATION: MUSCLES: MEASUREMENT METHODS: VIRGINIA; BIOACCUMULATION: FISHES: PESTICIDE RESIDUES; WATER EFFECTION: CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,3,4-Metheno-2H-Cyclobuta(cd)Pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-dechlorooctahydro-
 14-50-0
 C10-C110-O
 BW 490.68, VP <3X10 (E-7) ■■■ Bq at 25 C
 Trout
 CINCSECTION NEUROUSUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
514 Muscle	GC		1	a) Not applicable b) Not applicable c) Not applicable	a) 0.178 ppm b) 0.019 ppm c) < 1 ppb	a) Kepone b) Monohydro-Kepone c) Dihydro-Kepone Collected 1976/77 Virginia, James River Chesapeake Bay EXCHLORINATION: MUSCLES: MEASUREMENT METHODS: VIRGINIA; BIOACCUMULATION: FISHES: PESTICIDE RESIDUES; WATER EFFECTION: CHLORINE ORGANIC COMPOUNDS	Carver, R.A. Griffith, F.D., Jr. 1979 Journal of Agricultural and Food Chemistry 27(5):1035-1037

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
 C12-51-1
 2,7,13,6-Dimethanonaphthalene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2alpha,3beta,6beta,5alpha,7alpha)- (9 CI)
 C12-58-1
 MW 380.93, MP 176-177 C, VP 7.7810 (E-7) ■■ Hg at 20 C
 Crocodile, American
CROCODILUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
515 Eggs	GC-EC	a) 3 b) 3 c) 3 d) 5 e) 1 f) 2 g) 3 h) Not given	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.02 ppm b) 0.01 ppm c) 0.01 ppm d) 0.02 ppm e) 0.02 ppm f) 0.03 ppm g) 0.02 ppm h) Wet wt	7 clutches Shells, membranes removed. Mean shell thickness 0.49 mm	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90	

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
 2,7,13,6-Dimethanonaphthalene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2alpha,3beta,6beta,5alpha,7alpha)- (9 CI)
 C12-H8-CJ-6-0
 MW 380.93, MP 176-177 C, VP 7.7810 (E-7) ■■ Hg at 20 C
 Gull, great black-backed

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
516 Eggs	GC	28		0.0-0.55 ppm wet wt	0.12 + or - 0.16 ppm wet wt	Fatcliffe index 1.7-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77.	Szaro, R.C. Coon, M.C. Kolbe, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399

1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
 2,7,13,6-Dimethanonaphthalene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2alpha,3beta,6beta,5alpha,7alpha)- (9 CI)
 C12-51-1
 MW 380.93, MP 176-177 C, VP 7.7810 (E-7) ■■ Hg at 20 C
 Porpoise, harbor
ERCCINNA PHOCENA

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
517 Adipose	GC/MS	1		Not applicable	2.5 ug/g wet wt	In extractable lipids. Subcutaneous fat lipid content 0.6% value for fetus (20 cm length) of reached harbor porpoise in poor condition	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
 2,7,3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6alpha,7beta,7aalpha)- (9 CI)
 C12-BB-C16-C
 MW 380.93, MP 176-177 C, VP 7.7810 (E-7) mm Hg at 20 C
 Etorofuse, harbor
 EBCCOBIA PHOCENA

(CONTINUED)

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
518 Kidney	Placental Kidney	GC/MS	1	Not applicable	2.0 ug/g wet wt	In extractable lipids. Kidney lipid content 1.5% value for fetus (length 20 cm) of beached harbor porpoise in poor condition	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732
519 Liver	Placental Liver	GC/MS	1	Not applicable	4.7 ug/g wet wt	In extractable lipids. Liver lipid content 2%. Value for fetus (20 cm length) of beached harbor porpoise in poor condition	Duinker, J.C. Hillebrand, M.T.J. 1979 Bulletin of Environmental Contamination and Toxicology 23:728-732

1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-, endo,exo- (8 CI)
 2,7,3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6alpha,7beta,7aalpha)- (9 CI)
 C12-BB-C16-C
 MW 380.93, MP 176-177 C, VP 7.7810 (E-7) mm Hg at 20 C
 Snake, garter
 THAMPHIS SIRTALIS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
520 Body, whole		GC	6	0.10-0.19 ppm wet wt	0.09 ppm wet wt	snout-vent length 646-752 mm, lipid content 3.2-9.0%	Heinz, G.H. Paseitine, S.D. Hall, R.J. Krynnitsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3alpha,4beta,7beta,7alpha)-
 39765-80-5
 C10-H5-C19
 Crocodile, American
 CROCODILUS ACUTUS

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
521 Eggs	GC-EC	a) 3 b) 3 c) 5 d) 2 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.02 ppm b) 0.01 ppm c) 0.04 ppm d) 0.02 ppm e) 0.02 ppm Net wt	a) 0.02 ppm b) 0.01 ppm c) 0.04 ppm d) 0.02 ppm e) 0.02 ppm Net wt	5 clutches Shells, membranes removed. Mean shell thickness 0.49 mm	Hall, F.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 Bulletin of Environmental Contamination and Toxicology 23:87-90

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3alpha,4beta,7beta,7alpha)-
 39765-80-5
 C10-H5-C19
 EW 444.23
 Gull, herring
 LARUS ARINGTUS

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
522 Eggs	GC	a) 30 b) 28	a) 0.00-0.52 ppm b) 0.00-0.44 ppm Net wt	a) 0.05 + or - 0.10 ppm b) 0.04 + or - 0.09 ppm Net wt	a) Batcliffe index 1.53-1.99, shell thickness 0.34-0.47 mm, shell wt 5.07-7.49 g, lipid content 6.10-10.20% b) Batcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.86-7.54 g, lipid content 6.2-5.7% Collected 5/77.	Szaro, R.C. Coon, N.C. Rohba, E. 1979 Bulletin of Environmental Contamination and Toxicology 22:394-399	

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-2,3,3a,4,7,7a-hexahydro-, (1alpha,2beta,3alpha,3alpha,4beta,7beta,7alpha)-
 39765-80-5
 C10-H5-C19
 EW 444.23
 Snake, garter
 THAMNOPHTIS SIRTALIS

ISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
523 Body, whole	GC	6	0.10-0.33 ppm wet wt	0.18 ppm wet wt	Snout-vent length 646-752 mm, lipid content 3.2-9.0%	Heinz, G.H. Haseltine, S.D. Hall, R.J. Kryntsky, A.J. 1980 Bulletin of Environmental Contamination and Toxicology 25:738-743	

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-undachloro-2,3,3a,4,7a-hexahydro- (1alpha,2beta,3alpha,4beta,7alpha)-
 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (8 CI)
 2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

C10-H5-C19
 RR 444.23
 Snake, water
 MERIDA SIFEDON

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
524 Body whole	GC	1	Not applicable	0.25 ppm wet wt	Shout-vent length 855 mm. 6.2% lipid content	Beinz, G.H. Bassettine, S.D. Hall, R.J. Kryntsky, A.J. 1980 SNAKES; MARYLAND; BODY; PIOACCUMULATIIC; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; DDEDDT; MERCURY; POLYCHLORINATED EPHENYLIS	Bulletin of Environmental Contamination and Toxicology 25:738-743

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)

2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

C10-H4-C18-O

MR 423.77
Crocodile, American
CROCODILIUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
525 Eggs	GC-EC	a) 3 b) 3 c) 5 d) 1 e) 2 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.01 ppm b) 0.01 ppm c) 0.04 ppm d) 0.07 ppm e) 0.03 ppm f) 0.01 ppm Wet wt	7 clutches shells, membranes removed. Mean shell thickness 0.49 mm	Hall, R.J. Kaiser, T.E. Robertson, W.B., Jr. Patty, P.C. 1979 FLORIDA; EVERGLADES NATIONAL PARK	Pulletin of Environmental Contamination and Toxicology 23:87-90

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1,2-epoxy-3a,4,7,7a-tetrahydro- (8 CI)

2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro- (9 CI)

C10-H4-C18-O

MR 423.77
Gull, great black-backed
LARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
526 Eggs	GC	28	0.0-0.43 ppm wet wt	0.22 + or - 0.10 ppm wet wt	Fatchiffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-5.6%. Collected 5/77.	Szaro, R.C. Coon, N.C. Kolbe, E. 1979 Maine, APPLDORE ISLAND	Bulletin of Environmental Contamination and Toxicology 22:39-399

4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-1',2'-epoxy-3a',7,7a-tetrahydro- [8 CI]

C 10-14-18-O

2,5-Methano-2H-indeno(1,2-b)oxirene, 1a,2,3,4,5,6,7,7-octachloro-1a,1b,5,5a,6-hexahydro- [9 CI]

C 10-15-17-O

MS 423,72

Gull, herring

TARUS ARGENTATUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
527 Eggs	GC	28	0.00-0.18 ppp wet wt	0.02 + or - 0.05 ppp wet wt		Batcliffe index 1.62-2.11, shell thickness 0.33-0.46 mm, shell wt 4.88-7.64 g. Lipid content 6.2-9.7%, collected 5/77.	Szaro, R.C. Coon, M.C. Kolbe, E. 1979 <i>Bulletin of Environmental Contamination and Toxicology</i> 22: 394-399

4,7-Methanoindan, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a',7,7a-tetrahydro- [8 CI]

2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6-hexahydro- [9 CI]

C 10-15-17-O

MS 389,32

Crocodile, American

CROCODILUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
528 Eggs	GC-EC	a) 3 b) 3 c) 5 d) 2 e) 3 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.01 ppp b) 0.01 ppp c) 0.04 ppp d) 0.02 ppp e) 0.01 ppp f) 0.01 ppp wt		7 clutches shells, membranes removed. Mean shell thickness 0.49 mm	Hall, R.J. Kaiser, T.Z. Robertson, W.B., Jr. Patty, P.C. 1979 <i>Bulletin of Environmental Contamination and Toxicology</i> 23: 87-90

4,7-Methanoindan, 1alpha,2alpha,3alpha,7beta,8,8-nonachloro-3a,4,7,7a-tetrahydro- [8 CI]

4,7-Methano-1H-indene, 1,2,3,4,5,6,7,8,8-nonachloro-1a,1b,5,5a,6-hexahydro- [9 CI]

C 10-15-C19

MS 444,2

Crocodile, American

CROCODILUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
529 Eggs	GC-EC	a) 3 b) 3 c) 5 d) 2 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.02 ppp b) 0.01 ppp c) 0.03 ppp d) 0.02 ppp e) 0.03 ppp wt		5 clutches shells, membranes removed. Mean shell thickness 0.49 mm	Hall, R.J. Kaiser, T.Z. Robertson, W.B., Jr. Patty, P.C. 1979 <i>Bulletin of Environmental Contamination and Toxicology</i> 23: 87-90

4,7-Methanoindane, 1alpha,2alpha,5beta,7beta,8,8-octachloro-3alpha,4,7,7,7a-alpha-tetrahydro (8 CI)
 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- (1alpha,2alpha,3alpha,7beta,7aaalpha)- (9 CI)

C10-H6-C18
 MW 409.76
 Crocodile, American
CROCODILUS ACUTUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
530 Eggs	GC-EC	a) 3 b) 5 c) 2	a) Not given b) Not given c) Not given	a) 0.01 ppm b) 0.01 ppm c) 0.01 ppm Ret wt	0.01 ppm	3 clutches shells, membranes removed. Mean shell thickness 0.9 mm	Hall, R.J. Kaiser, T.P. Robertson, W.B., Jr. Patty, P.C. 1979 Florida, Everglades National Park

4,7-Methanoindane, 1alpha,2alpha,5beta,7beta,8,8-octachloro-3alpha,4,7,7,7a-alpha-tetrahydro (8 CI)
 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- (1alpha,2alpha,3alpha,4beta,7beta,7aaalpha)- (9 CI)

C10-H6-C18
 MW 409.76
 Gull, great black-backed
TARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
531 Eggs	GC	28	0.0-0.50 ppm wet wt	0.04 + or - 0.11 ppm wet wt	Batcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77.	Szaro, R.C. Coon, R.C. Kolbe, E. 1979 Maine, Appledore Island	

4,7-Methanoindene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrhydro- (8 CI)
 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrhydro- (9 CI)

C10-H5-C17
 MW 373.35, MP 95-96 C, VP 3X10 (8-4) mg Hg at 25 C
 Gull, great black-backed
TARUS MARINUS

TISSUE	EXPOSURE ROUTE	ANALYTICAL METHOD	NUMBER OF CASES	RANGE	MEAN	GENERAL INFORMATION	REFERENCE
532 Eggs	GC	28	0.0-0.41 ppm wet wt	0.05 + or - 0.11 ppm wet wt	Batcliffe index 1.71-2.11, shell thickness 0.39-0.47 mm, shell wt 7.21-9.09 g, lipid content 6.0-9.6%. Collected 5/77.	Szaro, R.C. Coon, R.C. Kolbe, E. 1979 Maine, Appledore Island	

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16. Abstract (Limit: 200 words) <p>A comprehensive data base of chemicals identified in feral and food animals has been established under the direction of the Exposure Evaluation Division in the Environmental Protection Agency's Office of Toxic Substances. This effort has grown out of the concern over continuing reports of toxic chemicals in human tissues and body fluids. Feral populations and food animals are regarded as indicators of environmental contamination and subsequent human body burden.</p>				
<p>This data base is a companion to <i>Chemicals Identified in Human Biological Media</i> and follows basically the same format. The data base on human body burdens is in its third year of publication. This is the first annual report for the feral and food animal file.</p> <p>Data were obtained primarily from the open literature through manual searches retrospective to 1979. The file contains information on 60 different substances.</p>				
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