CONTENTS OF US EPA TREATABILITY DATABASE

AS OF SEPTEMBER 30, 1987

by

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FOREWORD

The U.S. Environmental Protection Agency is charged by Congress with protecting the Nation's land, air and water systems. Under a mandate of national environmental laws, the Agency strives to formulate and implement actions leading to a compatible balance between human activities and the ability of natural systems to support and nurture life. The Clean Water Act, the Safe Drinking Water Act and the Toxic Substances Control Act are three of the major congressional laws that provide the framework for restoring and maintaining the integrity of our Nation's water, for preserving and enhancing the water we drink and for protecting the environment from toxic substances. These laws direct the EPA to perform research to define our environmental problems, measure the impacts and search for solutions.

The Water Engineering Research Laboratory is that component of EPA's Research and Development program concerned with preventing, treating and managing municipal and industrial wastewater discharges; establishing practices to control and remove contaminants from drinking water and to prevent its deterioration during storage and distribution; and assessing the nature and controllability of releases of toxic substances to the air, water and land from manufacturing processes and subsequent product uses. This publication is one of the products of that research and provides a vital communication link between the research and user community.

This report details the contents of the WERL Treatability Database. It is the result of a detailed literature search on the treatability of specific organic compounds in various water and waste streams, as well as a computer programming project. The development of this database is ongoing, this report contains the data as of September 30, 1987. In conjunction with this report is the WERL Database Users Manual.

ABSTRACT

This research program was initiated with the overall objective of providing a database on the treatability of priority pollutants and other hazardous organic compounds in water and/or wastewater.

A set of editing rules was developed and applied to the findings of an extensive literature search. The reports/articles and conference papers that met the established rules were summarized into the appropriate format and entered into the database.

The program for the database was developed using FOCUS programming. The program design was such that persons with minimal computer experience would be able to access any information provided in the database.

The database summarizes years of studies done on the treatability of organic compounds. It is not intended to be a design program.

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SECTION 1

INTRODUCTION

During the past ten to fifteen years EPA has generated a very large amount of data on the treatability of ground waters, surface waters, leachates, domestic wastewaters as well as industrial wastewater. Initially, these efforts were devoted to the removal of generic pollutants such as odor, color, BOD, taste, COD, TOC, etc. The past ten years have seen a major shift away from generic pollutants to specific compounds. For example, over 100 million dollars has been spent on the regulation of the "126 priority pollutants" for various major industrial categories (both direct and indirect discharges). Even with this major effort there are still a large number of industries for which regulations do not exist and permits have to be written based upon "Best Professional Judgement". In addition, the priority pollutants constitute only a portion of those pollutants which need to be considered for regulation in both municipal and industrial discharges because there are a large number of other pollutants which could cause human health effects through water contact sports as well as ingestion of the treated water and/or contaminated aquatic organisms.

The recent passage of various legislative amendments including SDWA, CWA, RCRA, SARA, TSCA and FIFRA has directed EPA to expand or initiate major programs directed toward removing/controlling specific compounds from all types of waters and waste streams. As a result, many of the pollutants of concern to the Agency are of interest to several program offices and the technologies for removal/destruction being evaluated are common to many different types of waters/wastewaters. Thus, there is a major need for EPA to initiate and maintain a database on the treatability of specific chemicals of concern to the Agency.

The WERL (Water Engineering Research Laboratory) Treatability Database was developed to fulfill this need. This is the first phase of the project, initiated June 1987. This volume contains the contents of the database as of September 30, 1987. The ultimate goal is to expand this database to include those compounds of interest to the US EPA and to keep the contents updated with new data as it becomes available.

SECTION 2

EDITING RULES

Guidelines by which all references are evaluated and data presented were established. The following Editing Rules are the results:

1. Only primary references will be used.

2. No reference using EPA screening data will be used.

3. Biological pilot and bench work must be acclimated.

4. Unless it is a SBR or intentionally fill and draw, all studies must be continuous feed. Batch studies will possibly be entered into the database at a later date.

5. Percent removals will be calculated as:

$$\frac{\text{Influent} - \text{Effluent}}{\text{Influent}} (100)$$

   on a concentration basis. Where possible, % removal on a mass basis will also be presented and so noted by "(M)".

6. For effluent concentration entries, no N.D.(not detectable), BDL (below detectable limit), or TS (trace substance), nomenclature will be used; instead it will be entered as the detectable limit value. If the value cannot be given, a determination will be made and so noted.

7. For determining the single value for effluent concentration and percent removal, the arithmetic mean will be used.

8. When using values for calculating the mean, results, < or > signs will be included for effluent concentration and percent removal when the value affects the mean. If it does not affect the mean, the sign will be dropped.

9. Effluent concentration and percent removal will be given to two significant digits. Except for removals greater than 90 percent. This will be treated as percent remaining and carried to two significant digits.

REFERENCE EVALUATION

References which were not in a peer reviewed journal or government report and/or database were reviewed and evaluated by the committee. The result of the review is reflected in the letter code of the reference number (see Section 3).

SECTION 3

TREATMENT TECHNOLOGY CODE TABLE

The following is the table of codes and abbreviations used through out this database.

Treatment Technologies Code and Abreviation Table

Treatment Technologies

AS	- Activated Sludge	
PACT	- Powdered Activated Carbon	addition to Activated Sludge
AFF	- Aerobic Fixed Film	
AL	- Aerobic Lagoons	
RBC	- Rotating Biological Contactor	
TF	- Trickling Filter	
AnFF	- Anaerobic Fixed Film	
RE	- Resin Exchange	
AIRS	- Air Stripping	
SS	- Steam Stripping	
WOX	- Wet Air Oxidation	
RO	- Reverse Osmosis	
AnL	- Anaerobic Lagoons	
GAC	- Activated Carbon (Granular)	
FIL	- Filtration	
CAC	- Chemically Assisted Clarification	
SBR	- Sequential Batch Reactor	

Scale

B - bench top P - pilot plant F - full scale

Number after letter refers to the plant number in a specific reference (ex: F7 - plant 7 is a full scale plant).

Matrix

C	clean water (ex. distilled)	G	ground water
S	synthetic wastewater	W	surface water
D	domestic wastewater	T	tap water
ML	municipal leachate	R	RCRA listed wastewater
HL	hazardous leachate	SF	superfund wastewater
I	industrial wastewater	AS-E	activated sludge effluent

(For I wastewater a 2 digit SIC code will be given, ex: I 22 (Textile Mill Products), or a "U" if the industry is unknown, I U.)

SIC (Standard Industrial Classification) Codes:

13	Oil and gas extraction	29	Petroleum refining and related ind.
20	Food and kindered products	30	Rubber and misc. plastic products
22	Textile mill products	31	Leather and leather products
24	Lumber and wood products	33	Primary metal industries
26	Paper and allied products	39	Misc. manufacturing industries
27	Printing and publishing	49	Electric, gas, and sanitary services
28	Chemicals and allied products	99	Nonclassifiable establishments

Effluent Concentration

Effluent concentration will be given as an arithmetic mean containing two significant figures. The number of samples used to calculate the mean is given after conc. in "(n)". (ex: 13 (5) - 13 is the mean of 5 sample values)

% Removal

Percent removals will be calculated on a concentration basis. If data is available, it will also be calculated on a mass basis for physical/chemical systems. Those values calculated on a mass basis will be noted by a "(m)". An example would be:

% Removal:	>99.95	>99.95 is based on concentration
	98(m)	98 is based on mass

The percent removal will be calculated as:

$$\frac{\text{Influent} - \text{Effluent}}{\text{Influent}} \times (100)$$

Reference Codes

A Papers in a peer reviewed journal.
B Government report or database.
C Reports and/or papers other than in groups A or B not reviewed.
D Group c papers and/or reports which have been given a "good" quality rating by a selected peer review.
E Group c papers and/or reports which have been given a "poor" quality rating by a selected peer review. This data will only be used when no other data are available.

SECTION 4

WERL DATABASE COMPOUNDS

The following is a listing of all compounds in the database (as of September 30, 1987) and their appropriate CAS number. This includes all alternate names.

The compounds with the asterisk (*) next to the CAS number are considered the primary name for the compound. All others are alternative names for each compound.

To select a compound press 'F6', position the cursor under the first character in the compound name and press 'F6' again. This will save the compound name and allow you to generate reports for it. To move quickly around the list of names type in 'N' or 'U' with a number (N1, U10, etc ..) following it and this will move up or down the number of pages you entered. The 'N' moves you down and the 'U' moves you up. Compounds with an '*' in front of the CAS No. are primary compounds in the database, all other names are synonyms. After selecting a compound press 'F3' to exit to the report options menu.

COMPOUND NAME		CAS NUMBER
ACENAPHTHENE	*	82-32-9
ACENAPHTHYLENE	*	208-96-8
ACETYLENE TETRACHLORIDE		79-34-5
ACROLEIN	*	107-02-8
ACRYLALDEHYDE		107-02-8
ACRYLIC ALDEHYDE		107-02-8
ACRYLON		107-13-1
ACRYLONITRILE	*	107-13-1
ALDIFEN		51-28-5
ALLYL ALDEHYDE		107-02-8
AMINOBENZENE		62-53-3
AMINOPHEN		62-53-3
ANILINE	*	62-53-3
ANILINE OIL		62-53-3
ANTHRACENE	*	120-12-7
ANTHRACIN		120-12-7
ANTICARIE		180-74-1
ANYVIM		62-53-3
AQUALIN		107-02-8
ARCTON 6		75-71-8
AROCHLOR 1221		11104-28-2
AROCHLOR 1254		11097-69-1
AROCHLOR 1260		11096-82-5
AROCLOR 1016	*	12674-11-2
AROCLOR 1221		11104-28-2
AROCLOR 1232		11141-16-5
AROCLOR 1242		53469-21-9
AROCLOR 1248		12672-29-6
AROCLOR 1254		11097-69-1
AROCLOR 1260		11096-82-5
BALTANA		71-55-6
BENZENAMINE		62-53-3
BENZENE	*	71-43-2
BENZENE CHLORIDE		108-90-7
BENZENE HEXACHLORIDE		58-89-9
BENZENEDICARBOXYLIC ACID, BUTYL-1,2-		85-68-7
BENZENOL		108-95-2
BENZINOFORM		56-23-5
BENZO(a)PHENANTHRENE		218-01-9
BENZO(a)PYRENE	*	50-32-8
BENZO(d,e,f)PHENANTHRENE		129-00-0
BENZOL		71-43-2
BENZOPYRENE,3,4-		50-32-8
BENZPHENANTHRENE,1,2-		218-01-9
BENZPYRENE,3,4-		50-32-8
BENZYL n-BUTYL PHTHALATE		85-68-7
BHC-gamma	*	58-89-9
BIPHENYLENEMETHANE,o-		86-73-7
BLUE OIL		62-53-3
BONOFORM		79-34-5
BP		50-32-8
BROMOFORM	*	75-25-2

BUNT-CURE		180-74-1
BUTYLBENZYL PHTHALATE,	*	85-68-7
BaP		50-32-8
CARBACRYL		107-13-1
CARBOLIC ACID		108-95-2
CARBON CHLORIDE		56-23-5
CARBON HEXACHLORIDE		67-72-1
CARBON TETRACHLORIDE	*	56-23-5
CASORON		1194-65-6
CASORON-133		1194-65-6
CELLOON		79-34-5
CHLORENE		75-00-3
CHLORETHYL		75-00-3
CHLORIDUM		75-00-3
CHLOROALLYL CHLORIDE,3-		542-75-6
CHLOROBEN		95-50-1
CHLOROBENZENE	*	108-90-7
CHLOROETHANE	*	75-00-3
CHLOROETHENE		75-01-4
CHLOROETHYLENE		75-01-4
CHLOROFORM	*	67-66-3
CHLOROPHEN		87-86-5
CHLOROPHENOL,2-	*	95-57-8
CHLOROPHENOL,o-		95-57-8
CHLOROPHENYL CHLORIDE,p-		106-46-7
CHLOROPROPENYL CHLORIDE,3-		542-75-6
CHLOROTHENE		71-55-6
CHLORYL		75-00-3
CHRYSENE	*	218-01-9
COAL NAPTHA		71-43-2
CRESOL,2-		95-48-7
CRESOL,4-		106-44-5
CRESOL,o-	*	95-48-7
CRESOL,p-	*	106-44-5
CRESYLIC ACID,o-		95-48-7
CRESYLIC ACID,p-		106-44-5
CYANOETHENE		107-13-1
CYANOETHYLENE		107-13-1
CYCLOHEXATRIENE		71-43-2
DCP		120-83-2
DI-CHLORICIDE		106-46-7
DIALATIN DB		95-50-1
DIBENZANTHRACENE,1,2:5,6-		53-70-3
DIBENZO(a,h)ANTHRACENE	*	53-70-3
DICHLOBENIL		1194-65-6
DICHLORIDE,TRANS-ACETYLENE		156-60-5
DICHLORO-1-PROPENE,1,3-		542-75-6
DICHLORO-2-PROPENE,1,3-		542-75-6
DICHLOROBENZENE,1,2-	*	95-50-1
DICHLOROBENZENE,1,3-	*	541-73-1
DICHLOROBENZENE,1,4-	*	106-46-7
DICHLOROBENZENE,m-		541-73-1
DICHLOROBENZENE,o-		95-50-1
DICHLOROBENZENE,p-		106-46-7
DICHLOROBENZOL,m-		541-73-1
DICHLOROBENZONITRILE,2,6-	*	1194-65-6
DICHLORODIFLUOROMETHANE	*	75-71-8
DICHLOROETHANE,1,1-	*	75-34-3
DICHLOROETHANE,1,2-	*	107-06-2
DICHLOROETHENE,1,1-		75-35-4
DICHLOROETHENE,TRANS-1,2-		156-60-5
DICHLOROETHYLENE,1,1-	*	75-35-4
DICHLOROETHYLENE,1,2-TRANS-	*	156-60-5
DICHLOROETHYLENE,asym-		75-35-4
DICHLOROETHYLENE,sym-		156-60-5
DICHLOROMETHANE		75-09-2

DICHLOROPHENOL,2,4-	*	120-83-2
DICHLOROPHENOL,4,6-		120-83-2
DICHLOROPROPENE,1,3-		542-75-6
DICHLOROPROPYLENE,1,3-	*	542-75-6
DIFLUORODICHLOROMETHANE		75-71-8
DIHYDROACENAPHTHYLENE,1,2-		82-32-9
DIMETHYBENZENE,1-HYDROXY-2,4-		105-67-9
DIMETHYBENZENE,4,6-		105-67-9
DIMETHYBENZENE,4-HYDROXY-1,3-		105-67-9
DIMETHYLPHENOL,2,4-	*	105-67-9
DINITROBENZENE,1-HYDROXY-2,4-		51-28-5
DINITROBENZENE,1-METHYL-2,4-		121-14-2
DINITROBENZENE,1-METHYL-2,6-		606-20-2
DINITROBENZENE,2-METHYL-1,3-		606-20-2
DINITROPHENOL,2,4-	*	51-28-5
DINITROPHENOL,alpha-		51-28-5
DINITROTOLUENE,2,4-	*	121-14-2
DINITROTOLUENE,2,6-	*	606-20-2
DINOFAN		51-28-5
DIOFORM		156-60-5
DIPHENYLENEMETHANE		86-73-7
DNP,2,4-		51-28-5
DNT,2,4-		121-14-2
DNT,2,6-		606-20-2
DOWTHERM E		95-50-1
ESSENCE OF MIRBANE		98-95-3
ESSENCE OF MYRBANE		98-95-3
ETHANE HEXACHLORIDE		67-72-1
ETHER HYDROCHLORIC		75-00-3
ETHER MURIATIC		75-00-3
ETHINYL TRICHLORIDE		79-01-6
ETHYL CHLORIDE		75-00-3
ETHYLBENZENE	*	100-41-4
ETHYLBENZOL		100-41-4
ETHYLENE DICHLORIDE		107-06-2
ETHYLENE TETRACHLORIDE		127-18-4
ETHYLENE TRICHLORIDE		79-01-6
ETHYLENENAPHTHALENE,1,8-		82-32-9
ETHYLIDENE CHLORIDE		75-34-3
ETHYLIDENE DICHLORIDE		75-34-3
FENOXUL CARBON N		51-28-5
FLUORENE	*	86-73-7
FREON 1110		127-18-4
FREON 12		75-71-8
FRIGEN 12		75-71-8
FUMIGRAIN		107-13-1
GENETRON 12		75-71-8
GENKLENE		71-55-6
GREEN OIL		120-12-7
GYLCOL DICHLORIDE		107-06-2
H 133		1194-65-6
HALON		75-71-8
HCCH		58-89-9
HCH		58-89-9
HEXACHLORETHANE		67-72-1
HEXACHLOROBENZENE	*	180-74-1
HEXACHLOROCYCLOHEXANE		58-89-9
HEXACHLOROETHANE	*	67-72-1
HEXACHLOROETHANE,1,1,1,2,2,2,-		67-72-1
HEXACHLOROETHYLENE		67-72-1
HOSTETEX L-PEC		120-82-1
HYDROCHLORIC ETHER		75-00-3
HYDROXY-2-METHYBENZENE,1-		95-48-7
HYDROXY-4-METHYLBENZENE,1-		106-44-5
HYDROXYBENZENE		108-95-2
HYDROXYBENZENE,1,3-DICHLORO-4-		120-83-2

HYDROXYNITROBENZENE,2-		88-75-5
HYDROXYNITROBENZENE,4-		100-02-7
HYDROXYNITROBENZENE,o-		88-75-5
HYDROXYNITROBENZENE,p-		100-02-7
HYDROXYTOLUENE,2-		95-48-7
HYDROXYTOLUENE,4-		106-44-5
HYDROXYTOLUENE,o-		95-48-7
HYDROXYTOLUENE,p-		106-44-5
ISOTRON 2		75-71-8
KRESOL,p-		106-44-5
KYANOL		62-53-3
LINDANE		58-89-9
MAGNACIDE H		107-02-8
MCB		108-90-7
METHACIDE		108-88-3
METHANE DICHLORIDE		75-09-2
METHANE TETRACHLORIDE		56-23-5
METHENYL TRIBROMIDE		75-25-2
METHYL CHLOROFORM		71-55-6
METHYLBENZENE		108-88-3
METHYLBENZOL		108-88-3
METHYLENE BICHLORIDE		75-09-2
METHYLENE CHLORIDE	*	75-09-2
METHYLENE DICHLORIDE		75-09-2
METHYLENEBIPHENYL,2,2'-		86-73-7
METHYLHYDROXYBENZENE,p-		106-44-5
METHYLPHENOL,2-		95-48-7
METHYLPHENOL,4-		106-44-5
METHYLPHENOL,o-		95-48-7
METHYLPHENOL,p-		106-44-5
METHYLPHENYLOL,o-		95-48-7
MIRBANE OIL		98-95-3
MONOCHLOROBENZENE		108-90-7
MONOCHLOROETHANE		75-00-3
MONOCHLOROETHYLENE		75-01-4
MONOPHENOL		108-95-2
MONOVINYLCHLORIDE		75-01-4
MOTH BALLS		91-20-3
MOTTENHEX		67-72-1
MURIATIC ETHER		75-00-3
MVC		75-01-4
NAPHTHALENE	*	91-20-3
NAPHTHENE		91-20-3
NIAGARA 5006		1194-65-6
NIPHEN		100-02-7
NITROBENZENE	*	98-95-3
NITROBENZENE,1-HYDROXY-4-		100-02-7
NITROBENZOL		98-95-3
NITROPHENOL,2-	*	88-75-5
NITROPHENOL,4-	*	100-02-7
NITROPHENOL,o-		88-75-5
NITROPHENOL,p-		100-02-7
NSC 8819		107-02-8
OIL OF MIRBANE		98-95-3
OIL OF MYRBANE		98-95-3
OXYBENZENE		108-95-2
OXYTOLUENE,o-		95-48-7
OXYTOLUENE,p-		106-44-5
PARADICHLOROBENZENE		106-46-7
PARAMOTH		106-46-7
PARANAPTHALENE		120-12-7
PCB 1221	*	11104-28-2
PCB 1232	*	11141-16-5
PCB 1242	*	53469-21-9
PCB 1248	*	12672-29-6
PCB 1254	*	11097-69-1

PCB 1260	*	11096-82-5
PCP		87-86-5
PDB		106-46-7
PENTACHLOROL		87-86-5
PENTACHLOROPHENOL	*	87-86-5
PERCHLOROBENZENE		180-74-1
PERCHLOROETHANE		67-72-1
PERCHLOROETHYLENE		127-18-4
PERCHLOROMETHANE		56-23-5
PERCLENE		127-18-4
PERIETHYLENENAPHTHALENE		82-32-9
PHENANTHRENE	*	85-01-8
PHENATHRIN		85-01-8
PHENE		71-43-2
PHENIC ACID		108-95-2
PHENOHEP		67-72-1
PHENOL	*	108-95-2
PHENYL CHLORIDE		108-90-7
PHENYL HYDRATE		108-95-2
PHENYL HYDROXIDE		108-95-2
PHENYLAMINE		62-53-3
PHENYLENE DICHLORIDE,m-		541-73-1
PHENYLETHANE		100-41-4
PHENYLMETHANE		108-88-3
PHENYLMETHYL ESTER		85-68-7
PHTHALIC ACID, BENZYL BUTYL ESTER		85-68-7
PROP-1-ONE,2-		107-02-8
PROP-2-EN-1-AL		107-02-8
PROPENAL		107-02-8
PROPENAL,2-		107-02-8
PROPENENITRILE		107-13-1
PROPENENITRILE,2-		107-13-1
PYRENE	*	129-00-0
PYROBENZOL		71-43-2
TAR CAMPHOR		91-20-3
TBH		58-89-9
TELONE		542-75-6
TETRA OLIVE N2G		120-12-7
TETRACHLOROETHANE		79-34-5
TETRACHLOROETHANE,1,1,2,2-	*	79-34-5
TETRACHLOROETHANE,s-		79-34-5
TETRACHLOROETHENE		127-18-4
TETRACHLOROETHENE,1,1,2,2-		127-18-4
TETRACHLOROETHYLENE	*	127-18-4
TETRACHLOROETHYLENE,1,1,2,2-		127-18-4
TETRACHLOROMETHANE		56-23-5
TOLUENE	*	108-88-3
TOLUOL		108-88-3
TOLUOL,o-		95-48-7
TOLUOL,p-		106-44-5
TOLYL ALCOHOL,p-		106-44-5
TRI-CLENE		79-01-6
TRIBROMOMETHANE		75-25-2
TRICHLOROBENZENE,1,2,4-	*	120-82-1
TRICHLOROBENZENE,1,2,5-		120-82-1
TRICHLOROBENZENE,1,3,4-		120-82-1
TRICHLOROBENZENE,unsym-		120-82-1
TRICHLOROBENZOL,1,2,4-		120-82-1
TRICHLOROETHANE		71-55-6
TRICHLOROETHANE,1,1,1-	*	71-55-6
TRICHLOROETHANE,1,1,2-	*	79-00-5
TRICHLOROETHENE		79-01-6
TRICHLOROETHYLENE	*	79-01-6
TRICHLOROFORM		67-66-3
TRICHLOROMETHANE		67-66-3
VCN		107-13-1

VENTOX		107-13-1
VINYL CHLORIDE	*	75-01-4
VINYL CYANIDE		107-13-1
VINYL TRICHLORIDE		79-00-5
VINYLIDENE CHLORIDE		75-35-4
XYLENOL,2,4-		105-67-9
XYLENOL,m-		105-67-9

SECTION 5

SUMMARY TABLE OF COMPOUND VS SOURCE MATRIX

The following is a print out of the Summary Table of as of September 30, 1987. The table summarizes the number of entries included in the database for each compound under each source matrix (i.e., groundwater, municipal treatment, hazardous leachate, etc).

Instructions:
To keep the compound as a border on the screen, press 'f2' and an arrow will appear in the highlighted line on the bottom of the screen. Move the arrow over until you are under the asterisk (*) and press 'F2' again.
Other function keys move you as follows (DO NOT USE THE ENTER KEY):
F7 - up one screen F8 - down one screen
F9 - to the left F10 - to the right

	SOURCE MATRIX					SOURCE MATRIX					
POLLUTANT	I	D	G	S	SF	ML	T	W	R	ML	C
ACENAPHTHENE	5	4	0	0	0	0	0	0	0	0	0
ACENAPHTHYLENE	5	0	0	0	0	0	0	0	0	0	0
ACROLEIN	1	0	0	1	0	0	0	0	0	0	0
ACRYLONITRILE	4	0	0	1	0	0	0	0	0	0	0
ANILINE	0	0	0	2	0	0	0	0	0	0	0
ANTHRACENE	5	3	0	0	0	0	0	0	0	0	0
BENZENE	12	8	1	5	0	0	0	0	0	0	0
BENZO(a)PYRENE	4	0	0	0	0	0	0	0	0	0	0
BHC-gamma	0	7	0	2	0	0	0	0	0	0	0
BROMOFORM	1	6	0	0	0	0	0	0	0	0	0
BUTYLBENZYL PHTHALATE	1	5	0	0	0	0	0	0	0	0	0
CARBON TETRACHLORIDE	2	7	0	1	0	0	0	0	0	0	0
CHLOROBENZENE	4	2	0	6	0	0	0	0	0	0	0
CHLOROETHANE	1	2	0	0	0	0	0	0	0	0	0
CHLOROFORM	7	13	0	3	0	0	3	0	0	0	0
CHLOROPHENOL,2-	3	0	0	0	5	0	0	0	0	0	0
CHRYSENE	5	1	0	0	0	0	0	0	0	0	0
CRESOL,o-	0	0	0	2	0	0	0	0	0	0	0
CRESOL,p-	0	0	0	2	0	0	0	0	0	0	0
DIBENZO(a,h)ANTHRACENE	1	0	0	0	0	0	0	0	0	0	0
DICHLOROBENZENE,1,2-	6	4	0	3	5	0	0	0	0	0	0
DICHLOROBENZENE,1,3-	2	1	0	1	0	0	0	0	0	0	0
DICHLOROBENZENE,1,4-	4	9	0	0	3	0	0	0	0	0	0
DICHLOROBENZONITRILE,2,6-	0	0	0	2	0	0	0	0	0	0	0
DICHLORODIFLUOROMETHANE	0	1	0	0	0	0	0	0	0	0	0
DICHLOROETHANE,1,1-	2	6	2	0	0	0	0	0	0	0	0
DICHLOROETHANE,1,2-	8	8	0	1	0	0	0	0	0	0	0
DICHLOROETHYLENE,1,1-	9	9	0	0	0	0	0	0	0	0	0
DICHLOROETHYLENE,1,2-TRANS-	2	4	0	0	0	0	0	0	0	0	0
DICHLOROPHENOL,2,4-	2	7	0	1	0	0	0	0	0	0	0
DICHLOROPROPYLENE,1,3-	2	1	0	0	0	0	0	0	0	0	0
DIMETHYLPHENOL,2,4-	4	2	0	0	3	0	0	0	0	0	0

Instructions:
To keep the compound as a border on the screen, press 'F2' and an arrow will appear in the highlighted line on the bottom of the screen. Move the arrow over until you are under the asterisk (*) and press 'F2' again.
Other function keys move you as follows (DO NOT USE THE ENTER KEY):
F7 - up one screen F8 - down one screen
F9 - to the left F10 - to the right

	SOURCE MATRIX										
	I	D	G	S	SF	ML	T	W	R	ML	C
POLLUTANT											
DINITROPHENOL,2,4-	4	0	0	1	0	0	0	0	0	0	0
DINITROTOLUENE,2,4-	2	0	0	0	0	0	0	0	0	0	0
DINITROTOLUENE,2,6-	3	1	0	0	0	0	0	0	0	0	0
ETHYLBENZENE	8	16	1	5	0	0	0	0	0	0	0
FLUORENE	4	2	0	0	0	0	0	0	0	0	0
HEXACHLOROBENZENE	2	0	0	0	0	0	0	0	0	0	0
HEXACHLOROETHANE	2	0	0	0	0	0	0	0	0	0	0
METHYLENE CHLORIDE	8	16	0	3	0	0	0	0	0	0	0
NAPHTHALENE	7	11	0	1	5	0	0	0	0	0	0
NITROBENZENE	5	1	0	3	0	0	0	0	0	0	0
NITROPHENOL,2-	9	1	0	0	0	0	0	0	0	0	0
NITROPHENOL,4-	9	1	0	0	0	0	0	0	0	0	0
PENTACHLOROPHENOL	3	8	0	1	3	0	0	0	0	0	0
PHENANTHRENE	3	8	0	1	0	0	0	0	0	0	0
PHENOL	21	14	0	8	3	1	0	0	0	0	0
PYRENE	5	7	0	0	0	0	0	0	0	0	0
TETRACHLOROETHANE,1,1,2,2-	1	1	0	1	0	0	0	0	0	0	0
TETRACHLOROETHYLENE	3	14	8	0	0	0	0	0	0	0	0
TOLUENE	12	14	1	4	0	0	0	0	0	0	0
TRICHLOROBENZENE,1,2,4-	1	4	0	2	0	0	0	0	0	0	0
TRICHLOROETHANE,1,1,1-	4	17	6	1	0	0	0	0	0	0	0
TRICHLOROETHANE,1,1,2-	7	2	0	0	0	0	0	0	0	0	0
TRICHLOROETHYLENE	6	14	14	1	2	0	0	0	0	0	0
VINYL CHLORIDE	3	3	1	0	0	0	0	0	0	0	0

SECTION 6

SUMMARY TABLE OF COMPOUND VS TREATMENT TECHNOLOGY

The following is a print out of the Summary Table of as of September 30, 1987. This table summarizes the number of entries included in the database for each compound under each type of treatment (i.e., air stripping, activated sludge, etc.).

Instructions:
To keep the compound as a border on the screen, press 'F2' and an arrow will appear in the highlighted line on the bottom of the screen. Move the arrow over until you are under the asterisk (*) press 'F2' again.
Other function keys move you as follows (DO NOT USE THE ENTER KEY):
F7 - up one screen F8 - down one screen
F9 - to the left F10 - to the right

	TECHNOLOGY															
	AS	TF	FIL	AnL	AL	CAC	GAC	AIRS	PACT	SS	WOX	RBC	SBR	AnFF	RO	RE
POLLUTANT *																
ACENAPHTHENE	5	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
ACENAPHTHYLENE	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACROLEIN	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACRYLONITRILE	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANILINE	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTHRACENE	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BENZENE	20	1	0	0	2	0	0	1	1	0	0	0	0	0	0	0
BENZO(a)PYRENE	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
BHC-gamma	4	1	0	0	2	1	0	0	1	0	0	0	0	0	0	0
BROMOFORM	3	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0
BUTYLBENZYL PHTHALATE	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CARBON TETRACHLORIDE	6	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0
CHLOROBENZENE	9	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0
CHLOROETHANE	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
CHLOROFORM	14	2	0	0	4	1	0	3	0	0	2	0	0	0	0	0
CHLOROPHENOL,2-	4	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0
CHRYSENE	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
CRESOL,o-	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
CRESOL,p-	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
DIBENZO(a,h)ANTHRACENE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
DICHLOROBENZENE,1,2-	13	0	0	0	3	0	0	0	1	0	0	1	0	0	0	0
DICHLOROBENZENE,1,3-	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
DICHLOROBENZENE,1,4-	9	1	0	0	4	1	0	0	0	0	0	1	0	0	0	0
DICHLOROBENZONITRILE,2,6-	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
DICHLORODIFLUOROMETHANE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DICHLOROETHANE,1,1-	3	1	0	0	3	1	0	1	0	0	0	0	0	0	0	0
DICHLOROETHANE,1,2-	11	1	0	0	4	1	0	0	0	0	0	0	0	0	0	0
DICHLOROETHYLENE,1,1-	10	1	1	0	2	1	1	0	1	0	0	0	0	0	0	1
DICHLOROETHYLENE,1,2-TRANS-	4	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
DICHLOROPHENOL,2,4-	6	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0
DICHLOROPROPYLENE,1,3-	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIMETHYLPHENOL,2,4-	4	1	0	0	2	0	0	0	0	0	0	1	0	0	0	0

Instructions:
To keep the compound as a border on the screen, press 'f2' and an arrow will appear in the highlighted line on the bottom of the screen. Move the arrow over until you are under the asterisk (*) press 'f2' again.
Other function keys move you as follows (DO NOT USE THE ENTER KEY):
f7 - up one screen f8 - down one screen
f9 - to the left f10 - to the right

	TECHNOLOGY								TECHNOLOGY							
POLLUTANT	AS	TF	FIL	AnL	AL	CAC	GAC	AIRS	PACT	SS	WOX	RBC	SBR	AnFF	RO	RE
DINITROPHENOL,2,4-	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DINITROTOLUENE,2,4-	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DINITROTOLUENE,2,6-	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ETHYLBENZENE	20	3	0	0	4	1	0	1	1	0	0	0	0	0	0	0
FLUORENE	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEXACHLOROBENZENE	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEXACHLOROETHANE	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
METHYLENE CHLORIDE	18	6	0	0	0	0	0	1	0	0	2	0	0	0	0	0
NAPHTHALENE	14	2	0	0	6	1	0	0	0	0	0	1	0	0	0	0
NITROBENZENE	7	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
NITROPHENOL,2-	6	0	0	0	0	0	1	0	2	0	0	0	0	0	0	1
NITROPHENOL,4-	5	0	1	0	0	0	1	0	2	0	0	0	0	0	0	1
PENTACHLOROPHENOL	7	3	0	0	3	1	0	0	0	0	0	1	0	0	0	0
PHENANTHRENE	7	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0
PHENOL	27	3	0	0	5	1	1	0	2	0	0	1	1	6	0	0
PYRENE	5	1	1	0	2	2	1	0	0	0	0	0	0	0	0	0
TETRACHLOROETHANE,1,1,2,2-	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TETRACHLOROETHYLENE	11	4	0	0	2	0	0	8	0	0	0	0	0	0	0	0
TOLUENE	24	3	0	0	2	0	0	1	1	0	0	0	0	0	0	0
TRICHLOROBENZENE,1,2,4-	5	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
TRICHLOROETHANE,1,1,1-	15	4	0	0	2	0	0	7	0	0	0	0	0	0	0	0
TRICHLOROETHANE,1,1,2-	4	0	1	0	0	0	1	0	2	0	0	0	0	0	0	1
TRICHLOROETHYLENE	15	4	0	0	1	0	0	15	0	0	2	0	0	0	0	0
VINYL CHLORIDE	5	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0

SECTION 7

WERL DATABASE PRINT OUTS

The following are all data in the computer database as of September 30, 1987. The data are presented alphabetically, by compound. The first page of information for each compound is the Physical Chemical Properties Report. This is followed by the Treatability reports. These are given in six concentration ranges.

Range No.	Influent Concentration Range
1	0-100 ug/L
2	>100-1000 ug/L
3	>1-10 mg/L
4	>10-100 mg/L
5	>100-1000 mg/L
6	>1000 mg/L

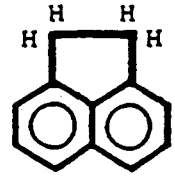
If the concentration range does not appear, there are no entries in that range for the compound.

COMPOUND: ACENAPHTHENE

CAS No.: 82-32-9 FORMULA: C12 H10

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 154.21	3B
MELTING POINT (C): 95	332A
BOILING POINT (C): 279	333A
VAPOR PRESSURE @ T(C), TORR: 0.33 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 2.42 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.33	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.41E-4 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	NA

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	190	0.36	mg/L	mg/gm	3B

COMPOUND: ACENAPHTHENE
CAS NO.: 82-32-9

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	204A	P	D	<1.2 (8)	>97.0
TF	1B	F52	D	6 (4)	86
AS	6B	F28	I 28	<10 (17)	>76
AS	6B	F5	I 28	<10 (7)	>90.0
CAC	188D	P	I 33	10 (8)	67

COMPOUND: ACENAPHTHENE
CAS NO.: 82-32-9

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	<1 (3)	>99.44
TF + AS	1B	F53	D	<14 (6)	>97.6
AS	6B	F33	I 28	<10 (13)	>98.9

COMPOUND: ACENAPHTHENE
CAS NO.: 82-32-9

INFLUENT CONCENTRATION - >1 - 10 mg/L

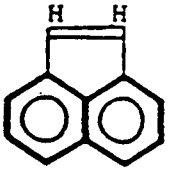
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS + FIL	6B	F26	I 28	<13 (3)	>99.66

COMPOUND: ACENAPHTHYLENE

CAS No.: 208-96-8 FORMULA: (C6 H4)2

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 152.21	333A
MELTING POINT (C): 92	333A
BOILING POINT (C): 265	333A
VAPOR PRESSURE @ T(C), TORR: 70 @ 100	336C
SOLUBILITY IN WATER @ T(C), MG/L: 3.93 @25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.07	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.14E-4 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	115	0.37	mg/L	mg/gm	3B

COMPOUND: ACENAPHTHYLENE
CAS NO.: 208-96-8

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F31	I 28	<10 (4)	>50
AS	6B	F5	I 28	<10 (7)	>85

COMPOUND: ACENAPHTHYLENE
CAS NO.: 208-96-8

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F33	I 28	<10 (13)	>97.9
AnL + AL	6B	F12	I 28	<10 (3)	>98.4

COMPOUND: ACENAPHTHYLENE
CAS NO.: 208-96-8

INFLUENT CONCENTRATION - >1 - 10 mg/L

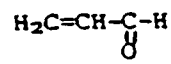
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS + FIL	6B	F26	I 28	<13 (3)	>99.87

COMPOUND: ACROLEIN

CAS No.: 107-02-8 FORMULA: C3 H4 O

COMPOUND TYPE: OXYGENATED-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 56.06	332A
MELTING POINT (C): -88	332A
BOILING POINT (C): 52.5	332A
VAPOR PRESSURE @ T(C), TORR: 210 @ 20	332A
SOLUBILITY IN WATER @ T(C), MG/L: 20.8	378B
LOG OCTANOL/WATER PARTITION COEFFICIENT: -0.09	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 7.74 E-5 @ 15 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	1.2	0.65	mg/L	mg/gm	3B

COMPOUND: ACROLEIN
CAS NO.: 107-02-8

INFLUENT CONCENTRATION >100 - 1000ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS + AL	6B	F16	I 28	<50 (2)	>94.7

COMPOUND: ACROLEIN
CAS NO.: 107-02-8

INFLUENT CONCENTRATION - >10 - 100 mg/L

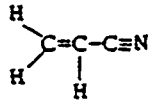
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	202C	B	S	<50	>99.92

COMPOUND: ACRYLONITRILE

CAS No.: 107-13-1 FORMULA: C3 H3 N

COMPOUND TYPE: MISCELLANEOUS-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 53.06	332A
MELTING POINT (C): 147.2	9B
BOILING POINT (C): 77.3	332A
VAPOR PRESSURE @ T(C), TORR: 298 @ 15	336B
SOLUBILITY IN WATER @ T(C), MG/L: 73500 @ 20	332A
LOG OCTANOL/WATER PARTITION COEFFICIENT: -0.92	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 6.66 E-5 @ 15 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	1.4	0.51	mg/L	mg/gm	3B

COMPOUND: ACRYLONITRILE
CAS NO.: 107-13-1

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS + AL	6B	F16	I 28	<50 (3)	>98.2

COMPOUND: ACRYLONITRILE
CAS NO.: 107-13-1

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F19	I 28	<50 (3)	>99.83
AS	6B	F29	I 28	<50 (16)	>99.75
AS	6B	F3	I 28	<50 (40)	>99.93

COMPOUND: ACRYLONITRILE
CAS NO.: 107-13-1

INFLUENT CONCENTRATION - >100 - 1000 mg/L

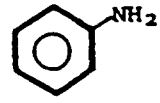
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	202C	B	S	<0.050	>99.97

COMPOUND: ANILINE

CAS No.: 62-53-3 FORMULA: C6 H7 N

COMPOUND TYPE: AROMATIC-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 93.12	332A
MELTING POINT (C): -6.3	333A
BOILING POINT (C): 184.13	333A
VAPOR PRESSURE @ T(C), TORR: 0.28 @ 15	336B
SOLUBILITY IN WATER @ T(C), MG/L: 63694 @ 100	332A
LOG OCTANOL/WATER PARTITION COEFFICIENT:	
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: NOT EXTRAPOLATIVE	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: ANILINE
CAS NO.: 62-53-3

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	189C	B	S	500 (2)	90

COMPOUND: ANILINE
CAS NO.: 62-53-3

INFLUENT CONCENTRATION - >100 - 1000 mg/L

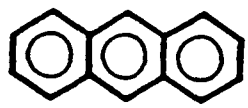
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	226B	P	S	<0.08 (13)	>99:93

COMPOUND: ANTHRACENE

CAS No.: 120-12-7 FORMULA: C14 H10

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 178.24	332A
MELTING POINT (C): 216.2	333A
BOILING POINT (C): 342	332A
VAPOR PRESSURE @ T(C), TORR: 0.00128 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.045 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.45	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.7E-4 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	376	0.70	mg/L	mg/gm	3B

COMPOUND: ANTHRACENE
CAS NO.: 120-12-7

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F6	D	13 (4)	82
AS	204A	P	D	<0.9 (8)	>97.4
AS	6B	F31	I 28	<10 (7)	>82
AnL + AL	6B	F12	I 28	<10 (3)	>80

COMPOUND: ANTHRACENE
CAS NO.: 120-12-7

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
TF	1B	F52	D	<17 (6)	>92.3
AS	6B	F33	I 28	<10 (14)	>98.6
TF + AS	6B	F21	I 28	<11 (3)	>97.8

COMPOUND: ANTHRACENE
CAS NO.: 120-12-7

INFLUENT CONCENTRATION - >1 - 10 mg/L

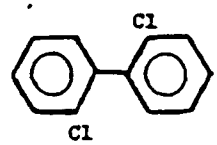
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS + FIL	6B	F26	I 28	<10 (3)	>99.52

COMPOUND: AROCLOR 1016

CAS No.: 12674-11-2 FORMULA: C12 H7 CL3 (57%)

COMPOUND TYPE: BIPHENYL-POLYCHLORINATED

STRUCTURE:



(typical)

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 257.9	378B
MELTING POINT (C):	
BOILING POINT (C):	
VAPOR PRESSURE @ T(C), TORR: 0.83 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.42 @25	378B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.38	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.07 E-2 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB 400	C	3.44	0.66	ug/L	mg/gm	30A
FILTRASORB 400	S	3.16	0.56	ug/L	mg/gm	30A
NORIT PEAT	C	13.7	0.27	ug/L	mg/gm	30A
NUCHAR WV-G	C	15.4	0.25	ug/L	mg/gm	30A
HYDRODARCO 1030	C	4.1	0.46	ug/L	mg/gm	30A

COMPOUND: AROCLOR 1016
CAS NO.: 12674-11-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
NA TO DATE					

COMPOUND: BENZENE

CAS No.: 71-43-2 FORMULA: C6 H6

COMPOUND TYPE: AROMATIC-

STRUCTURE:

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 78.11	8B
MELTING POINT (C): 5.5	8B
BOILING POINT (C): 80.1	8B
VAPOR PRESSURE @ T(C), TORR: 100 @ 26.1	8B
SOLUBILITY IN WATER @ T(C), MG/L: 820	9B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.13	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 5.55 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	1.0	1.6	mg/L	mg/gm	3B
HYDRODARCO C	S(AS-E)	0.5	0.46	ug/L	ug/mg	200B
NORIT PEAT	C	0.73	0.61	ug/L	mg/gm	30A
NUCHAR WV-G	C	1.07	0.48	ug/L	mg/gm	30A
FILTRASORB 400	C	1.12	0.39	ug/L	mg/gm	30A
HYDRODARCO 1030	C	1.18	0.36	ug/L	mg/gm	30A
FILTRASORB 400	S	0.81	0.51	ug/L	mg/gm	30A

COMPOUND: BENZENE
CAS NO.: 71-43-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	6 (10)	81
AS	1B	F58	D	<16 (6)	>84
AS	206B	P	D	<0.2 (20)	>99.73
TF	1B	F11	D	1 (5)	97.5
AS	6B	F2	I 28	<10 (29)	>89
AS	200B	B	S	0.5 (16)	97.8

COMPOUND: BENZENE
CAS NO.: 71-43-2

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	<10 (6)	>94.4
AS	1B	F28	D	<1 (6)	>99.55
AS	1B	F30	D	<2 (6)	>99.00
AS	1B	F38	D	2 (6)	98.9
AIRS	224B	P	G	<0.50 (1)	>99.67
AS	6B	F3	I 28	<25 (31)	>91.4
AS	6B	F33	I 28	<10 (14)	>98.6
AS	6B	F5	I 28	<10 (7)	>98.8
AS	200B	B	S	0.8 (16)	99.30
AS	200B	B	S	1.0 (8)	99.83
PACT	200B	B	S	0.7 (12)	99.34

COMPOUND: BENZENE
CAS NO.: 71-43-2

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	6B	F14	I 28	<14 (3)	>98.9
AS	6B	F1	I 28	<11 (27)	>99.80
AS	6B	F10	I 28	<10 (3)	>99.09
AS	6B	F11	I 28	<10 (3)	>99.71
AS	6B	F17	I 28	95 (10)	97.2

COMPOUND: BENZENE
CAS NO.: 71-43-2

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL + AS	6B	F25	I 28	<10 (3)	>99.98
AS	6B	F31	I 28	<10 (15)	>99.97

WERL Treatability Database Rev. No. 1.0 10/14/87

COMPOUND: BENZENE
CAS NO.: 71-43-2

INFLUENT CONCENTRATION - >100 - 1000 mg/L

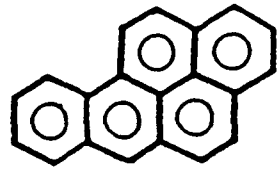
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	6B	F34	I 28	8.2 (10)	96.4
AS	202C	B	S	0.040	99.97

COMPOUND: BENZO(a)PYRENE

CAS No.: 50-32-8 FORMULA: C20 H12

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 252.32	8B
MELTING POINT (C): 178.8	9B
BOILING POINT (C): 495	2A
VAPOR PRESSURE @ T(C), TORR: 0.00041 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.004 @ 25	8B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 6.04	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.17 E-2 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	33.6	0.44	mg/L	mg/gm	3B

COMPOUND: BENZO(a)PYRENE
CAS NO.: 50-32-8

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	FS	I 28	<21 (4)	>4
FIL	188D	P	I 33	10 (9)	50

COMPOUND: BENZO(a)PYRENE
CAS NO.: 50-32-8

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F33	I 28	<10 (10)	>95.2

WERL Treatability Database Rev. No. 1.0 10/14/87

COMPOUND: BENZO(a)PYRENE
CAS NO.: 50-32-8

INFLUENT CONCENTRATION - >1 - 10 mg/L

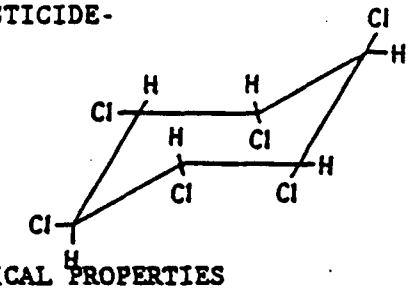
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
CAC	188D	P	I 33	20 (8)	98.1

COMPOUND: BHC-gamma

CAS No.: 58-89-9 FORMULA: C6 H6 CL6

COMPOUND TYPE: PESTICIDE-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 290.85	8B
MELTING POINT (C): 112.5	8B
BOILING POINT (C): 323.4	8B
VAPOR PRESSURE @ T(C), TORR: 9.4 E-6 @ 20	8B
SOLUBILITY IN WATER @ T(C), MG/L: 7.3 @ 25	8B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 3.72 @ 25	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.17 E-1 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	4B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	256	0.49	mg/L	mg/gm	3B
MLSS	C	0.0014	0.789	ug/L	ug/mg	200B
HYDRODARCO C	S(AS-E)	4.0	0.39	ug/L	ug/mg	200B

COMPOUND: BHC-gamma
CAS NO.: 58-89-9

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	22 (11)	44
AL	203A	P2	D	7 (11)	82
AS	201B	F	D	<1 (2)	>66
AS	203A	P	D	31 (11)	20
AS	204A	P	D	<26 (8)	>44
CAC	203A	P	D	32 (11)	18
TF	203A	P	D	34 (11)	13

COMPOUND: BHC-gamma
CAS NO.: 58-89-9

INFLUENT CONCENTRATION - >100 - 1000 ug/L

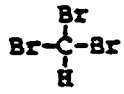
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	200B	B	S	99 (13)	8.3
PACT	200B	B	S	8 (17)	92.1

COMPOUND: BROMOFORM

CAS No.: 75-25-2 FORMULA: C H BR3

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 252.75	3B
MELTING POINT (C): 8.3	333A
BOILING POINT (C): 149.5	333A
VAPOR PRESSURE @ T(C), TORR: 10 @ 34	379B
SOLUBILITY IN WATER @ T(C), MG/L: 1250 @ 25	332A
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.30	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 5.32 E-4 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB 400	C	1802.0	0.5629	ug/L	ug/gm	73A
WESTVACO WV-G	C	436.6	0.6889	ug/L	ug/gm	73A
FILTRASORB	C	19.6	0.52	mg/L	mg/gm	3B
WESTVACO WV-W	C	474.6	0.6482	ug/L	ug/gm	73A
HD-3000	C	632.0	0.5608	ug/L	ug/gm	73A

COMPOUND: BROMOFORM
CAS NO.: 75-25-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

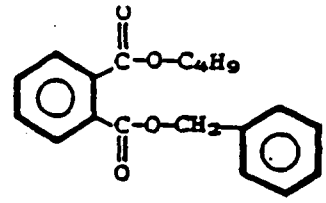
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	15 (14)	83
AL	203A	P2	D	22 (14)	76
AS	1B	F30	D	4 (1)	90.5
AS	203A	P	D	29 (14)	68
CAC	203A	P	D	114 (14)	0
TF	203A	P	D	41 (14)	54
AS	6B	F28	I 28	<10 (6)	>54

COMPOUND: BUTYLBENZYL PHTHALATE

CAS No.: 85-68-7 FORMULA: C19 H20 O4

COMPOUND TYPE: PHTHALATE-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 312.36	3B
MELTING POINT (C): -35	379B
BOILING POINT (C): 377	379B
VAPOR PRESSURE @ T(C), TORR: 0.3 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 2.9 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 5.8	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.78 E-1 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	1520	1.26	mg/L	mg/gm	3B

COMPOUND: BUTYLBENZYL PHTHALATE
CAS NO.: 85-68-7

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F32	D	<2 (3)	>93.8
AS	1B	F4	D	2 (6)	96.7
AS	1B	F8	D	5 (3)	91.8
AS	204A	P	D	<1.3 (8)	>96.2
AS	6B	F29	I 28	<10 (4)	>86

COMPOUND: BUTYLBENZYL PHTHALATE
CAS NO.: 85-68-7

INFLUENT CONCENTRATION - >100 - 1000 ug/L

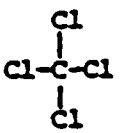
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F28	D	<3 (6)	>98.3

COMPOUND: CARBON TETRACHLORIDE

CAS No.: 56-23-5 FORMULA: C CL4

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 153.84	8B
MELTING POINT (C): -23	8B
BOILING POINT (C): 77	2A
VAPOR PRESSURE @ T(C), TORR: 113 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 800 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.64	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 30.2 E -3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	4B
AQUATIC TOXICITY DATABASE	NA

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	11.1	0.83	mg/L	mg/gm	3B
NORIT PEAT	C	0.16	0.75	ug/L	mg/gm	30A
NUCHAR WV-G	C	0.22	0.69	ug/L	mg/gm	30A
FILTRASORB 400	C	0.23	0.74	ug/L	mg/gm	30A
HYDRODARCO 1030	C	0.13	0.68	ug/L	mg/gm	30A
FILTRASORB 400	S	0.26	0.67	ug/L	mg/gm	30A
FILTRASORB 400	T	0.20	0.60	ug/L	mg/gm	30A

COMPOUND: CARBON TETRACHLORIDE
CAS NO.: 56-23-5

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	15 (14)	78
AL	203A	P2	D	11 (14)	84
AS	203A	P	D	13 (14)	81
AS	206B	P	D	<0.2 (20)	>99.67
CAC	203A	P	D	101 (14)	0
TF	203A	P	D	26 (14)	62

COMPOUND: CARBON TETRACHLORIDE
CAS NO.: 56-23-5

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F28	D	16 (6)	88
AS	6B	F11	I 28	<10 (3)	>96.7

COMPOUND: CARBON TETRACHLORIDE
CAS NO.: 56-23-5

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	<10 (18)	>99.73

COMPOUND: CARBON TETRACHLORIDE
CAS NO.: 56-23-5

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	202C	B	S	130	99.32

COMPOUND: CHLOROBENZENE

CAS No.: 108-90-7 FORMULA: C6 H5 CL

COMPOUND TYPE: AROMATIC-

STRUCTURE:

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 112.56	8B
MELTING POINT (C): -45.6	8B
BOILING POINT (C): 132	8B
VAPOR PRESSURE @ T(C), TORR: 10 @ 22.2	8B
SOLUBILITY IN WATER @ T(C), MG/L: 488 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.84	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.93 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	91	0.99	mg/L	mg/gm	3B
HYDRODARCO C	S(AS-E)	1.8	0.40	ug/L	ug/mg	200B

COMPOUND: CHLOROBENZENE
CAS NO.: 108-90-7

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F3	I 28	<10 (17)	>72
AS	200B	B	S	0.2 (8)	99.23

COMPOUND: CHLOROBENZENE
CAS NO.: 108-90-7

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F30	D	3 (6)	98.9
AS	206B	P	D	<1.3 (20)	>99.34
AS	6B	F17	I 28	77 (11)	91.2
AS	6B	F28	I 28	<10 (20)	>95.4
AS	200B	B	S	1.1 (12)	99.17
AS	200B	B	S	1.3 (6)	99.81
PACT	200B	B	S	0.8 (11)	99.37

COMPOUND: CHLOROBENZENE
CAS NO.: 108-90-7

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F34	I 28	670 (10)	95.2

COMPOUND: CHLOROBENZENE
CAS NO.: 108-90-7

INFLUENT CONCENTRATION - >100 - 1000 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	186D	B	S	61	92.3

COMPOUND: CHLOROBENZENE
CAS NO.: 108-90-7

INFLUENT CONCENTRATION - >1000 mg/L

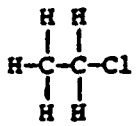
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	186D	B	S	240 (2)	90.5

COMPOUND: CHLOROETHANE

CAS No.: 75-00-3 FORMULA: C2 H5 CL

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 64.52	3B
MELTING POINT (C): -136.4	333A
BOILING POINT (C): 12.27	333A
VAPOR PRESSURE @ T(C), TORR: 1180 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 5740 @ 20	332A
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.54	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.308E-2 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	NA

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	0.59	0.95	mg/L	mg/gm	3B

COMPOUND: CHLOROETHANE
CAS NO.: 75-00-3

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	<50 (9)	>50

COMPOUND: CHLOROETHANE
CAS NO.: 75-00-3

INFLUENT CONCENTRATION - >100 - 1000 ug/L

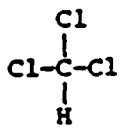
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	260 (5)	30
AS	1B	F51	D	640 (5)	0

COMPOUND: CHLOROFORM

CAS No.: 67-66-3 FORMULA: C H CL3

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 119.39	8B
MELTING POINT (C): -63.5	8B
BOILING POINT (C): 61.7	8B
VAPOR PRESSURE @ T(C), TORR: 159 @ 20	8B
SOLUBILITY IN WATER @ T(C), MG/L: 9600 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.97	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.39 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	4B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	2.6	0.73	mg/L	mg/gm	3B
FILTRASORB 400	C	39.23	0.7556	ug/L	ug/gm	73A
NUCHAR-WV	S(I-36)	0.010	0.772	ug/L	mg/gm	170C
FILTRASORB 300	G	8.83	0.588	mg/L	mg/gm	94C
HD-3000	C	92.48	0.6704	ug/L	ug/gm	73A
WESTVAC WV-W	C	55.69	0.7380	ug/L	ug/gm	73A

COMPOUND: CHLOROFORM
CAS NO.: 67-66-3

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	38 (29)	53
AS	1B	F1	D	21 (6)	62
AS	1B	F30	D	6 (5)	86
AS	1B	F36	D	20 (3)	80
TF	1B	F40	D	14 (4)	86
AL	6B	F30	I 28	<10 (11)	>77
AS	6B	F32	I 28	30 (9)	70
AIRS	213B	P	T	13 (1)	77
AIRS	225B	P	T	0.13 (1)	98.9

COMPOUND: CHLOROFORM
CAS NO.: 67-66-3

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	<26 (6)	>96.8
AL	203A	P1	D	53 (14)	61
AL	203A	P2	D	31 (14)	77
AS	1B	F28	D	59 (6)	51
AS	206B	P	D	3.6 (20)	97.4
AS	203A	P	D	18 (14)	87
CAC	203A	P	D	106 (14)	22
TF	203A	P	D	102 (14)	24
AS	6B	F11	I 28	<10 (3)	>98.2
AS	6B	F20	I 28	<10 (3)	>97.7
AS	6B	F9	I 28	<10 (15)	>96.0
AIRS	210B	P	T	<1 (1)	>99.20

COMPOUND: CHLOROFORM
CAS NO.: 67-66-3

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F1	I 28	<19 (27)	>98.7
AS	6B	F9	I 28	<10 (3)	>99.41

COMPOUND: CHLOROFORM
CAS NO.: 67-66-3

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	202C	B	S	200	99.43

COMPOUND: CHLOROFORM
CAS NO.: 67-66-3

INFLUENT CONCENTRATION - >100 - 1000 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	186D	B	S	<1 (2)	>99.75

COMPOUND: CHLOROFORM
CAS NO.: 67-66-3

INFLUENT CONCENTRATION - >1000 mg/L

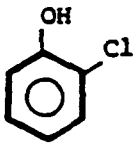
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	186D	B	S	<1	>99.92

COMPOUND: CHLOROPHENOL,2-

CAS No.: 95-57-8 FORMULA: C6 H5 CL O

COMPOUND TYPE: PHENOL-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 125.56	3B
MELTING POINT (C): 9.0	333A
BOILING POINT (C): 174.9	333A
VAPOR PRESSURE @ T(C), TORR: 1.4 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 28500 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.15	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.458 E-4 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	51.0	0.41	mg/L	mg/gm	3B
FILTRASORB 300	C	88	0.30	mg/L	mg/gm	138C

COMPOUND: CHLOROPHENOL,2-
CAS NO.: 95-57-8

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
TF + AL	6B	F4	I 28	<10 (12)	>88

COMPOUND: CHLOROPHENOL,2-
CAS NO.: 95-57-8

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F11	I 28	<10 (3)	>97.2
AL	192C	P	SF	<10	>95.0
AS	192C	P	SF	<10 (3)	>95.0
RBC	192C	P	SF	<10	>95.0

COMPOUND: CHLOROPHENOL,2-
CAS NO.: 95-57-8

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	192C	P	SF	<10	>99.07
AS	192C	P	SF	<10 (3)	>99.07

COMPOUND: CHLOROPHENOL,2-
CAS NO.: 95-57-8

INFLUENT CONCENTRATION - >10 - 100 mg/L

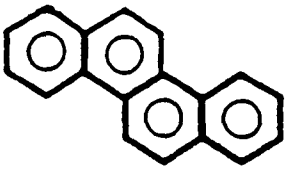
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F34	I 28	93 (10)	99.78

COMPOUND: CHRYSENE

CAS No.: 218-01-9 FORMULA: C18 H12

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 228.28	332A
MELTING POINT (C): 254	332A
BOILING POINT (C): 448	332A
VAPOR PRESSURE @ T(C), TORR: 0.04 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 2.0 E-3 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 5.61	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.106 E-3 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: CHRYSENE
CAS NO.: 218-01-9

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	204A	P	D	<1.2 (8)	>96.9
FIL	188D	P	I 33	20 (9)	50

COMPOUND: CHRYSENE
CAS NO.: 218-01-9

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F31	I 28	<10 (4)	>99.00
AS	6B	F33	I 28	<10 (11)	>96.8

COMPOUND: CHRYSENE
CAS NO.: 218-01-9

INFLUENT CONCENTRATION - >1 - 10 mg/L

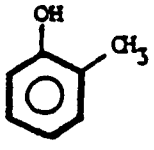
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS + Fil	6B	F26	I 28	<10 (3)	>99.09
CAC	188D	P	I 33	40 (8)	98.1

COMPOUND: CRESOL,o-

CAS No.: 95-48-7 FORMULA: C7 H8 O

COMPOUND TYPE: PHENOL-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 108.13	332A
MELTING POINT (C): 30	332A
BOILING POINT (C): 190.95	332A
VAPOR PRESSURE @ T(C), TORR:	
SOLUBILITY IN WATER @ T(C), MG/L: 25000 @ 25	332A
LOG OCTANOL/WATER PARTITION COEFFICIENT:	
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1:	

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: CRESOL,o-
CAS NO.: 95-48-7

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	189C	B	S	1900 (2)	98.1

COMPOUND: CRESOL,o-
CAS NO.: 95-48-7

INFLUENT CONCENTRATION - >100 - 1000 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AnFF	230 A	B	S	<26	78

COMPOUND: CRESOL,p-

CAS No.: 106-44-5 FORMULA: C7 H8 O

COMPOUND TYPE: PHENOL-

STRUCTURE:

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 108.13	332A
MELTING POINT (C): 35.5	332A
BOILING POINT (C): 201.8	332A
VAPOR PRESSURE @ T(C), TORR:	
SOLUBILITY IN WATER @ T(C), MG/L: 25000 @ 50	332A
LOG OCTANOL/WATER PARTITION COEFFICIENT:	
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1:	

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
PX-21(AMOCO)	S	0.0586	0.3776	moles/L	moles/gm	112A

COMPOUND: CRESOL,p-
CAS NO.: 106-44-5

INFLUENT CONCENTRATION - >100 - 1000 mg/L

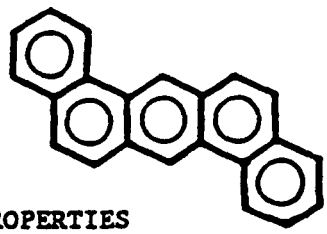
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	189C	B	S	6.6 (2)	90.0
AnFF	230A	B	S	<17	>90.7

COMPOUND: DIBENZO(a,h)ANTHRACENE

CAS No.: 53-70-3 FORMULA: C22 H14

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 278.33	332A
MELTING POINT (C): 266	332A
BOILING POINT (C):	
VAPOR PRESSURE @ T(C), TORR: 70 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.0005 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 5.97	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 131.4 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	NA

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	69.3	0.75	mg/L	mg/gm	3B

COMPOUND: DIBENZO(a,h)ANTHRACENE
CAS NO.: 53-70-3

INFLUENT CONCENTRATION - >100 - 1000 mg/L

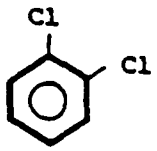
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
CAC	188D	P	I 33	<10 (8)	92.9

COMPOUND: DICHLOROBENZENE,1,2-

CAS No.: 95-50-1 FORMULA: C6 H4 CL2

COMPOUND TYPE: AROMATIC-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 174.0	3B
MELTING POINT (C): -17.0	333A
BOILING POINT (C): 180.5	336B
VAPOR PRESSURE @ T(C), TORR: 1.4 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 145 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 3.38	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.94 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	129	0.43	mg/L	mg/gm	3B
HYDRODARCO C	S(AS-E)	3.2	0.41	ug/L	ug/mg	200B

COMPOUND: DICHLOROBENZENE,1,2-
CAS NO.: 95-50-1

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F32	D	<2 (3)	>94.3
AL	6B	F30	I 28	<10 (13)	>67

COMPOUND: DICHLOROBENZENE,1,2-
CAS NO.: 95-50-1

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F28	D	<5 (2)	>96.2
AS	1B	F4	D	<10 (5)	>91.7
AS	1B	F60	D	<6 (4)	>96.0
AS	6B	F11	I 28	<10 (3)	>92.9
AS	6B	F28	I 28	<14 (20)	>98.5
AS	200B	B	S	8 (14)	92.7
PACT	200B	B	S	2.9 (14)	97.5
AL	192C	P	SF	<10	>97.6
AS	192C	P	SF	283 (3)	34
RBC	192C	P	SF	<10	>97.6

COMPOUND: DICHLOROBENZENE,1,2-
CAS NO.: 95-50-1

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	52 (3)	98.5
AS	6B	F17	I 28	560 (15)	63
AS	6B	F34	I 28	88 (10)	98.5
AL	192C	P	SF	100 (8)	94.8
AS	192C	P	SF	260	86

COMPOUND: DICHLOROBENZENE,1,2-
CAS NO.: 95-50-1

INFLUENT CONCENTRATION - >10 - 100 mg/L

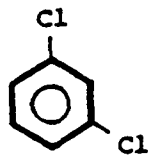
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	202C	B	S	<50	>99.94

COMPOUND: DICHLOROBENZENE,1,3-

CAS No.: 541-73-1 FORMULA: C6 H4 CL2

COMPOUND TYPE: AROMATIC-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 147.01	332A
MELTING POINT (C): -24.7	333A
BOILING POINT (C): 173	333A
VAPOR PRESSURE @ T(C), TORR: 2.1 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 123 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 3.38	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.63 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	118	0.45	mg/L	mg/gm	3B

COMPOUND: DICHLOROBENZENE,1,3-
CAS NO.: 541-73-1

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	6B	F30	I 28	<10 (10)	>58

COMPOUND: DICHLOROBENZENE,1,3-
CAS NO.: 541-73-1

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F31	D	<5 (2)	>98.0
AS	6B	F34	I 28	25 (10)	96.9

COMPOUND: DICHLOROBENZENE,1,3-
CAS NO.: 541-73-1

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	202C	B	S	340	99.51

COMPOUND: DICHLOROBENZENE,1,4-

CAS No.: 106-46-7 FORMULA: C6 H4 CL2

COMPOUND TYPE: AROMATIC-

STRUCTURE:

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 147.00	332A
MELTING POINT (C): 53.1	333A
BOILING POINT (C): 174	333A
VAPOR PRESSURE @ T(C), TORR: 1.9 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 79 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 3.38	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.72 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	121	0.47	mg/L	mg/gm	3B
FILTRASORB 400	S	16.3	0.39	ug/L	mg/gm	30A
FILTRASORB 400	C	17.1	0.37	ug/L	mg/gm	30A

COMPOUND: DICHLOROBENZENE,1,4-
CAS NO.: 106-46-7

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	31 (11)	67
AL	203A	P2	D	12 (11)	87
AS	201B	F	D	<6 (2)	>79
AS	1B	F32	D	<5 (1)	>93.1
AS	1B	F4	D	8 (1)	83
AS	1B	F60	D	<10 (2)	>76
AS	203A	P	D	5 (11)	94.6
CAC	203A	P	D	66 (11)	29
TF	203A	P	D	58 (11)	38
AL	6B	F30	I 28	<10 (4)	>69
AS	6B	F17	I 28	16 (4)	83
AS	6B	F34	I 28	<10 (10)	>87
AL	192C	P	SF	<10 (2)	>89
AS	192C	P	SF	<10 (6)	>89
RBC	192C	P	SF	<10	>90.0

COMPOUND: DICHLOROBENZENE,1,4-
CAS NO.: 106-46-7

INFLUENT CONCENTRATION - >100 - 1000 ug/L

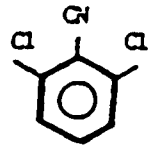
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F28	I 28	<10 (20)	>90.9

COMPOUND: DICHLOROBENZONITRILE,2,6-

CAS No.: 1194-65-6 FORMULA: C7 H3 CL2 N

COMPOUND TYPE: PESTICIDE-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 172.02	332A
MELTING POINT (C): 144	332A
BOILING POINT (C):	
VAPOR PRESSURE @ T(C), TORR: 3.0 E-6 @ 20	332A
SOLUBILITY IN WATER @ T(C), MG/L: 25 @ 25	332A
LOG OCTANOL/WATER PARTITION COEFFICIENT:	
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 5.0 E-6 @ 20 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: DICHLOROBENZONITRILE,2,6-
CAS NO.: 1194-65-6

INFLUENT CONCENTRATION - >100 - 1000 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	186D	B	S	34 (2)	95.5

COMPOUND: DICHLOROBENZONITRILE,2,6-
CAS NO.: 1194-65-6

INFLUENT CONCENTRATION - >1000 mg/L

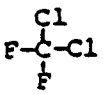
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	186D	B	S	370	83

COMPOUND: DICHLORODIFLUOROMETHANE

CAS No.: 75-71-8 FORMULA: C CL2 F2

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 120.92	332A
MELTING POINT (C): -158	332A
BOILING POINT (C): -29.8	332A
VAPOR PRESSURE @ T(C), TORR: 4250 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 28 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.16	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.88 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	4B
AQUATIC TOXICITY DATABASE	NA

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: DICHLORODIFLUOROMETHANE
CAS NO.: 75-71-8

INFLUENT CONCENTRATION - 0 - 100 ug/L

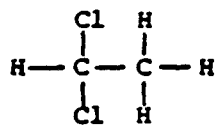
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F20	D	<40 (4)	>33

COMPOUND: DICHLOROETHANE,1,1-

CAS No.: 75-34-3 FORMULA: C2 H4 CL2

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 98.96	8B
MELTING POINT (C): -96.98	8B
BOILING POINT (C): 57	2A
VAPOR PRESSURE @ T(C), TORR: 230 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 5500 @ 20	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.70	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 5.45 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	1.79	0.53	mg/L	mg/gm	3B

COMPOUND: DICHLOROETHANE,1,1-
CAS NO.: 75-34-3

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	<10 (2)	>88
AIRS	222B	P	G	<0.3 (1)	>97.5
AIRS + GAC	229A	F	G	<1 (19)	>97.4

COMPOUND: DICHLOROETHANE,1,1-
CAS NO.: 75-34-3

INFLUENT CONCENTRATION - >100 - 1000 ug/L

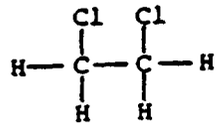
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	45 (14)	69
AL	203A	P2	D	19 (14)	87
AS	203A	P	D	8 (14)	94.4
CAC	203A	P	D	111 (14)	23
TF	203A	P	D	94 (14)	35
AS	6B	F1	I 28	<10 (4)	>94.1
AS	6B	F1	I 28	29 (3)	97.1

COMPOUND: DICHLOROETHANE,1,2-

CAS No.: 107-06-2 FORMULA: C2 H4 CL2

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 99	336B
MELTING POINT (C): -35.36	8B
BOILING POINT (C): 83	2A
VAPOR PRESSURE @ T(C), TORR: 87 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 8690 @ 20	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.48	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.10 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	3.57	0.83	mg/L	mg/gm	3B
FILTRASORB	S	0.05	0.83	ug/L	mg/gm	30A

COMPOUND: DICHLOROETHANE,1,2-
CAS NO.: 107-06-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	<10 (15)	>80

COMPOUND: DICHLOROETHANE,1,2-
CAS NO.: 107-06-2

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	45 (14)	71
AL	203A	P2	D	15 (14)	90.2
AS	203A	P	D	22 (14)	86
CAC	203A	P	D	109 (14)	29
TF	203A	P	D	93 (14)	39
AL	6B	F30	I 28	<10 (13)	>93.8
AS	6B	F11	I 28	<10 (3)	>98.4
AS	6B	F3	I 28	<15 (12)	>98.5
AS	6B	F32	I 28	92 (14)	84

COMPOUND: DICHLOROETHANE,1,2-
CAS NO.: 107-06-2

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	<10 (6)	>99.75
AS	1B	F28	D	4400 (6)	33
AS	6B	F1	I 28	<28 (24)	>98.6

COMPOUND: DICHLOROETHANE,1,2-
CAS NO.: 107-06-2

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F30	D	1800 (6)	89
AS	6B	F9	I 28	1200 (3)	98.5

COMPOUND: DICHLOROETHANE,1,2-
CAS NO.: 107-06-2

INFLUENT CONCENTRATION - >100 - 1000 mg/L

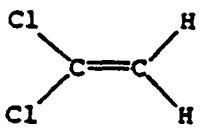
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	6B	F34	I 28	31 (10)	83
AS	202C	B	S	3.7	98.6

COMPOUND: DICHLOROETHYLENE,1,1-

CAS No.: 75-35-4 FORMULA: C2 H2 CL2

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 96.94	3B
MELTING POINT (C): -122.5	332A
BOILING POINT (C): 31.7	332A
VAPOR PRESSURE @ T(C), TORR: 500 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 5030 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.48	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 15.0 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	4B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	4.91	0.54	mg/L	mg/gm	3B

COMPOUND: DICHLOROETHYLENE,1,1-
CAS NO.: 75-35-4

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	<1 (2)	>97.5
AS	1B	F14	D	<5 (2)	>86
AS	1B	F28	D	6 (2)	92.9
AS	206B	P	D	<0.2 (20)	>99.75
AS	6B	F1	I 28	<10 (3)	>56

COMPOUND: DICHLOROETHYLENE,1,1-
CAS NO.: 75-35-4

INFLUENT CONCENTRATION - >100 - 1000 ug/L

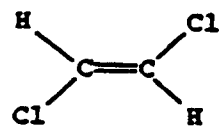
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	83 (14)	61
AL	203A	P2	D	35 (14)	84
AS	203A	P	D	14 (14)	93.4
CAC	203A	P	D	150 (14)	29
TF	203A	P	D	85 (14)	60
AS	6B	F1	I 28	25 (3)	97.0
AS	6B	F11	I 28	<10 (3)	>97.2
AS	6B	F3	I 28	<10 (24)	>97.0
AS	187D	P	I 28	16 (8)	94.5
FIL	187D	P	I 28	110 (6)	62
GAC	187D	P	I 28	13 (8)	95.5
PACT	187D	P	I 28	<10 (10)	>96.6
RE	187D	P	I 28	<10 (7)	>96.6

COMPOUND: DICHLOROETHYLENE,1,2-TRANS-

CAS No.: 156-60-5 FORMULA: C2 H2 CL2

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 96.94	9B
MELTING POINT (C): -50	9B
BOILING POINT (C): 48	2A
VAPOR PRESSURE @ T(C), TORR: 200 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 7780 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.48	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 5.32 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	3.05	0.51	mg/L	mg/gm	3B

COMPOUND: DICHLOROETHYLENE,1,2-TRANS-
CAS NO.: 156-60-5

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F4	D	8 (5)	71
AS	1B	F57	D	3 (4)	93.5
AS	1B	F6	D	7 (3)	88
TF	1B	F40	D	1 (5)	97.9
AL	6B	F6	I 28	<13 (3)	>52

COMPOUND: DICHLOROETHYLENE,1,2-TRANS-
CAS NO.: 156-60-5

INFLUENT CONCENTRATION - >100 - 1000 ug/L

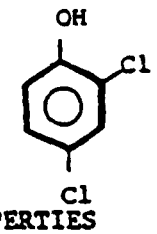
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	77 (3)	82

COMPOUND: DICHLOROPHENOL,2,4-

CAS No.: 120-83-2 FORMULA: C6 H4 CL2 O

COMPOUND TYPE: PHENOL-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 163.0	333A
MELTING POINT (C): 45	333A
BOILING POINT (C): 210	333A
VAPOR PRESSURE @ T(C), TORR: 0.13 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 4500 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.75	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.584E-4 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	157	0.15	mg/L	mg/gm	3B
FILTRASORB 300	C	131	0.24	mg/L	mg/gm	138C

COMPOUND: DICHLOROPHENOL,2,4-
CAS NO.: 120-83-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	12 (2)	54
AS	6B	F11	I 28	<10 (3)	>89

COMPOUND: DICHLOROPHENOL,2,4-
CAS NO.: 120-83-2

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	155 (11)	32
AL	203A	P2	D	65 (11)	71
AS	1B	F54	D	300 (4)	52
AS	203A	P	D	1 (11)	99.56
CAC	203A	P	D	92 (11)	60
TF	203A	P	D	200 (11)	12

COMPOUND: DICHLOROPHENOL,2,4-
CAS NO.: 120-83-2

INFLUENT CONCENTRATION - >10 - 100 mg/L

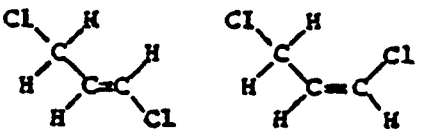
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F34	I 28	18 (10)	99.90
AS	202C	B	S	3600	95.2

COMPOUND: DICHLOROPROPYLENE,1,3-

CAS No.: 542-75-6 FORMULA: C3 H4 CL2

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



(trans) (cis)

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 110.98	332A
MELTING POINT (C): 104.3	332A
BOILING POINT (C): 108	332A
VAPOR PRESSURE @ T(C), TORR: 25 @ 20	379B
SOLUBILITY IN WATER @ T(C), MG/L: 2700 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.98	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.55 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: DICHLOROPROPYLENE,1,3-
CAS NO.: 542-75-6

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
TF	1B	F39	D	<1 (1)	>99.00

COMPOUND: DICHLOROPROPYLENE,1,3-
CAS NO.: 542-75-6

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F1	I 28	<10 (24)	>97.3
AS	6B	F24	I 28	63 (3)	88

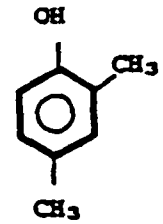
COMPOUND: DIMETHYLPHENOL,2,4-

CAS No.: 105-67-9

FORMULA: C8 H10 O

COMPOUND TYPE: PHENOL-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 122.17	333A
MELTING POINT (C): 25.4	332A
BOILING POINT (C): 210	333A
VAPOR PRESSURE @ T(C), TORR: 0.051 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L:	
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.50	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 9.36 E-5 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	70	0.44	mg/L	mg/gm	3B
PX-21(AMOCO)	S	0.0258	0.2175	moles/L	moles/gm	112A

COMPOUND: DIMETHYLPHENOL,2,4-
CAS NO.: 105-67-9

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	204A	P	D	<0.9 (8)	>99.06
TF	1B	F52	D	<25 (2)	>38

COMPOUND: DIMETHYLPHENOL,2,4-
CAS NO.: 105-67-9

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F5	I 28	<13 (7)	>98.1

COMPOUND: DIMETHYLPHENOL,2,4-
CAS NO.: 105-67-9

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	6B	F30	I 28	<14 (13)	>99.70
AS + FIL	6B	F26	I 28	<10 (3)	>99.90
AL	192C	P	SF	<10	>99.81
AS	192C	P	SF	<10 (3)	>99.81
RBC	192C	P	SF	<10	>99.81

COMPOUND: DIMETHYLPHENOL,2,4-
CAS NO.: 105-67-9

INFLUENT CONCENTRATION - >10 - 100 mg/L

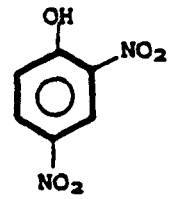
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F33	I 28	<10 (14)	>99.97

COMPOUND: DINITROPHENOL,2,4-

CAS No.: 51-28-5 FORMULA: C6 H4 N2 O5

COMPOUND TYPE: PHENOL-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 184.11	3B
MELTING POINT (C): 112	332A
BOILING POINT (C): SUBLIMES	9B
VAPOR PRESSURE @ T(C), TORR: <4.9 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 5600 @ 18	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.51	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.134 E-5 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	33	0.61	mg/L	mg/gm	3B

COMPOUND: DINITROPHENOL,2,4-
CAS NO.: 51-28-5

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F3	I 28	90 (4)	71

COMPOUND: DINITROPHENOL,2,4-
CAS NO.: 51-28-5

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	<50 (3)	>95.4
AS	6B	F2	I 28	<50 (7)	>97.4
AS	6B	F28	I 28	100 (20)	97.7

COMPOUND: DINITROPHENOL,2,4-
CAS NO.: 51-28-5

INFLUENT CONCENTRATION - >10 - 100 mg/L

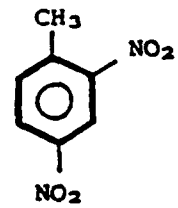
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	202C	B	S	660	99.31

COMPOUND: DINITROTOLUENE,2,4-

CAS No.: 121-14-2 FORMULA: C7 H6 N2 O4

COMPOUND TYPE: AROMATIC-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 182.14	3B
MELTING POINT (C): 71	333A
BOILING POINT (C): 300	333A
VAPOR PRESSURE @ T(C), TORR: 2.7 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 270	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.01	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.22E-4 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	146	0.31	mg/L	mg/gm	3B

COMPOUND: DINITROTOLUENE,2,4-
CAS NO.: 121-14-2

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	880 (15)	51

COMPOUND: DINITROTOLUENE,2,4-
CAS NO.: 121-14-2

INFLUENT CONCENTRATION - >10 - 100 mg/L

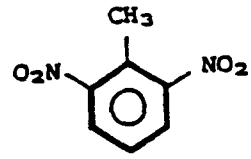
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	110 (3)	99.15

COMPOUND: DINITROTOLUENE,2,6-

CAS No.: 606-20-2 FORMULA: C7 H6 N2 O4

COMPOUND TYPE: AROMATIC-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 182.14	3B
MELTING POINT (C): 66	333A
BOILING POINT (C): 285	379B
VAPOR PRESSURE @ T(C), TORR: 2.7 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L:	
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.05	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.22E-4 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	145	0.32	mg/L	mg/gm	3B

COMPOUND: DINITROTOLUENE,2,6-
CAS NO.: 606-20-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F58	D	<18 (2)	>18
AS	6B	F34	I 28	<19 (3)	>51

COMPOUND: DINITROTOLUENE,2,6-
CAS NO.: 606-20-2

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	320 (15)	33

COMPOUND: DINITROTOLUENE,2,6-
CAS NO.: 606-20-2

INFLUENT CONCENTRATION - >1 - 10 mg/L

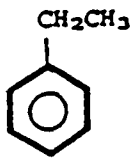
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	260 (3)	92.4

COMPOUND: ETHYLBENZENE

CAS No.: 100-41-4 FORMULA: C8 H10

COMPOUND TYPE: AROMATIC-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 106	9B
MELTING POINT (C): -94.97	8B
BOILING POINT (C): 136.2	8B
VAPOR PRESSURE @ T(C), TORR: 10 @ 25.9	8B
SOLUBILITY IN WATER @ T(C), MG/L: 1400 @ 15	8B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 3.15	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 6.44 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	4B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	53	0.79	mg/L	mg/gm	3B
HYDRODARCO C	S(AS-E)	1.6	0.39	ug/L	ug/mg	200B

COMPOUND: ETHYLBENZENE
CAS NO.: 100-41-4

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	<10 (4)	>69
AS	201B	F	D	6 (16)	92.8
AS	1B	F17	D	<1 (4)	>97.7
AS	1B	F4	D	<1 (5)	>98.1
AS	1B	F59	D	<8 (4)	>89
AS	206B	P	D	<0.2 (20)	>99.76
TF	1B	F17	D	4 (4)	90.9
AIRS	224B	P	G	<0.5 (1)	>91.9
AL	6B	F6	I 28	<10 (3)	>84
AS	6B	F29	I 28	<10 (16)	>90.0
AS	200B	B	S	0.5 (9)	99.50
PACT	200B	B	S	0.4 (11)	99.57

COMPOUND: ETHYLBENZENE
CAS NO.: 100-41-4

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	27 (14)	76
AL	203A	P2	D	12 (14)	89
AS	1B	F27	D	<1 (4)	>99.17
AS	1B	F28	D	4 (6)	97.5
AS	1B	F36	D	2 (3)	99.26
AS	203A	P	D	6 (14)	94.6
CAC	203A	P	D	73 (14)	34
TF	1B	F27	D	11 (4)	90.8
TF	203A	P	D	31 (14)	72
AS	6B	F1	I 28	<10 (24)	>94.4
AS	6B	F2	I 28	<10 (20)	>97.0
AS	6B	F3	I 28	<10 (37)	>97.2
AS	6B	F31	I 28	<10 (15)	>98.9
AS	200B	B	S	0.6 (12)	99.50
AS	200B	B	S	0.7 (6)	99.89

COMPOUND: ETHYLBENZENE
CAS NO.: 100-41-4

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F19	I 28	<10 (3)	>99.38

COMPOUND: ETHYLBENZENE
CAS NO.: 100-41-4

INFLUENT CONCENTRATION - >10 - 100 mg/L

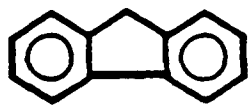
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F5	I 28	<10 (7)	>99.97
AS	202C	B	S	80	99.87

COMPOUND: FLUORENE

CAS No.: 86-73-7 FORMULA: C13 H10

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 166.21	332A
MELTING POINT (C): 116	333A
BOILING POINT (C): 293	333A
VAPOR PRESSURE @ T(C), TORR: 0.017 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 1.98 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.18	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.17 E-4 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	330	0.28	mg/L	mg/gm	3B

COMPOUND: FLUORENE
CAS NO.: 86-73-7

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	204A	P	D	<0.7 (8)	>98.2
TF	1B	F52	D	<20 (4)	>54
AS	6B	F31	I 28	<10 (6)	>79
AS	6B	F5	I 28	<10 (7)	>86

COMPOUND: FLUORENE
CAS NO.: 86-73-7

INFLUENT CONCENTRATION - >100 - 1000 ug/L

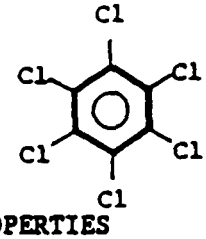
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F33	I 28	<10 (13)	>99.17
AnL + AL	6B	F12	I 28	<10 (3)	>94.1

COMPOUND: HEXACHLOROBENZENE

CAS No.: 180-74-1 FORMULA: C6 CL6

COMPOUND TYPE: AROMATIC-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 284.80	332A
MELTING POINT (C): 231	332A
BOILING POINT (C): 323	332A
VAPOR PRESSURE @ T(C), TORR: 0.0033 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.003 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 6.18	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.70 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	NA

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	450	0.60	mg/L	mg/gm	3B

COMPOUND: HEXACHLOROBENZENE
CAS NO.: 180-74-1

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	<10 (3)	>68

COMPOUND: HEXACHLOROBENZENE
CAS NO.: 180-74-1

INFLUENT CONCENTRATION - >100 - 1000 ug/L

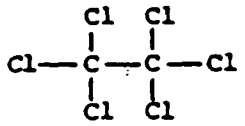
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	<10 (15)	>96.4

COMPOUND: HEXACHLOROETHANE

CAS No.: 67-72-1 FORMULA: C2 CL6

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 236.74	3B
MELTING POINT (C): 186.8	333A
BOILING POINT (C): 186	333A
VAPOR PRESSURE @ T(C), TORR: 0.58 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 50 @ 20	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 3.34	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 9.85 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	96.5	0.38	mg/L	mg/gm	3B

COMPOUND: HEXACHLOROETHANE
CAS NO.: 67-72-1

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	<10 (15)	>93.8

COMPOUND: HEXACHLOROETHANE
CAS NO.: 67-72-1

INFLUENT CONCENTRATION - >1 - 10 mg/L

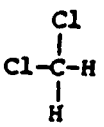
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	<10 (3)	>99.56

COMPOUND: METHYLENE CHLORIDE

CAS No.: 75-09-2 FORMULA: C H2 CL2

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 84.94	8B
MELTING POINT (C): -95.1	8B
BOILING POINT (C): 39.75	8B
VAPOR PRESSURE @ T(C), TORR: 455 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 2.0 E4 @ 20	8B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.25	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.19 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	4B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	1.30	1.16	mg/L	mg/gm	3B
NUCHAR-WV	S(I-36)	0.0032	0.67	ug/L	mg/gm	170C

COMPOUND: METHYLENE CHLORIDE
CAS NO.: 75-09-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	45 (27)	51
AS	1B	F17	D	9 (3)	75
AS	1B	F18	D	23 (3)	74
AS	1B	F7	D	23 (3)	64
TF	1B	F10	D	58 (5)	40
TF	1B	F21	D	20 (5)	67
TF	1B	F39	D	21 (5)	77
AS	6B	F1	I 28	14 (16)	68
AS	6B	F29	I 28	28 (14)	43
AS	6B	F32	I 28	<10 (5)	>69

COMPOUND: METHYLENE CHLORIDE
CAS NO.: 75-09-2

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F37	D	46 (6)	69
AS	1B	F4	D	130 (6)	54
AS	1B	F5	D	560 (5)	31
AS	206B	P	D	<4 (20)	>96.6
TF	1B	F11	D	37 (5)	66
TF	1B	F29	D	120 (4)	56
TF	1B	F37	D	16 (6)	89
AIRS	205C	P	I	<3	>99.62
AS	6B	F11	I 28	<10 (3)	>98.7
AS	6B	F17	I 28	<11 (14)	>98.8
AS	6B	F3	I 28	<15 (6)	>97.4

COMPOUND: METHYLENE CHLORIDE
CAS NO.: 75-09-2

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F14	D	56 (5)	97.8
AS	1B	F31	D	2000 (5)	5
AS	6B	F17	I 28	<10 (3)	>99.74

COMPOUND: METHYLENE CHLORIDE
CAS NO.: 75-09-2

INFLUENT CONCENTRATION - >100 - 1000 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	202C	B	S	0.51	99.72
WOX	186D	B	S	<1 (2)	>99.74

COMPOUND: METHYLENE CHLORIDE
CAS NO.: 75-09-2

INFLUENT CONCENTRATION - >1000 mg/L

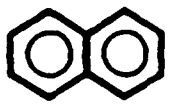
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	187D	B	S	<1	>99.91

COMPOUND: NAPHTHALENE

CAS No.: 91-20-3 FORMULA: C10 H8

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 128.16	8B
MELTING POINT (C): 80.2	8B
BOILING POINT (C): 217.9	8B
VAPOR PRESSURE @ T(C), TORR: 1.0 @ 53	336B
SOLUBILITY IN WATER @ T(C), MG/L: 34.4 @ 25	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 3.37	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 4.86E-4 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	132	0.42	mg/L	mg/gm	3B

COMPOUND: NAPHTHALENE
CAS NO.: 91-20-3

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	5 (11)	89
AS	1B	F36	D	9 (5)	86
AS	1B	F38	D	<3 (4)	>91.9
AS	204A	P	D	<0.7 (8)	>99.09
TF	1B	F21	D	<3 (6)	>89
AS	6B	F7	I 28	<10 (3)	>76
AL	192C	P	SF	<10	>82
AS	192C	P	SF	28 (3)	48
RBC	192C	P	SF	<10	>82

COMPOUND: NAPHTHALENE
CAS NO.: 91-20-3

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	36 (11)	67
AL	203A	P2	D	13 (11)	88
AS	1B	F60	D	<10 (5)	>95.4
AS	203A	P	D	4 (11)	96.3
CAC	203A	P	D	79 (11)	27
TF	203A	P	D	74 (11)	32
AL	6B	F14	I 28	<20 (3)	>90.5
AL	6B	F30	I 28	<10 (13)	>98.1
AS	6B	F11	I 28	<10 (3)	>96.0
AS	6B	F31	I 28	<10 (13)	>99.00
AL	192C	P	SF	25	96.5
AS	192C	P	SF	58 (3)	91.8

COMPOUND: NAPHTHALENE
CAS NO.: 91-20-3

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F5	I 28	<10 (7)	>99.57
AS	202C	B	S	<10	>99.86

COMPOUND: NAPHTHALENE
CAS NO.: 91-20-3

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F33	I 28	<10 (14)	>99.95

COMPOUND: NITROBENZENE

CAS No.: 98-95-3 FORMULA: C6 H5 N O2

COMPOUND TYPE: AROMATIC-

STRUCTURE:

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 123.11	332A
MELTING POINT (C): 5.7	333A
BOILING POINT (C): 210.8	333A
VAPOR PRESSURE @ T(C), TORR: 0.407 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 1900 @ 20	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.85	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.40 E-5 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	4B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	68	0.43	mg/L	mg/gm	3B
HYDRODARCO C	S(AS-E)	3.2	0.35	ug/L	ug/mg	200B

COMPOUND: NITROBENZENE
CAS NO.: 98-95-3

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F28	I 28	<15 (10)	>38

COMPOUND: NITROBENZENE
CAS NO.: 98-95-3

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F59	D	<23 (1)	>90.0
PACT	190E	B	I 28	21	96.0
AS	200B	B	S	3 (16)	97.5
PACT	200B	B	S	3.7 (12)	96.7

COMPOUND: NITROBENZENE
CAS NO.: 98-95-3

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	690 (15)	72
AS	6B	F2	I 28	<14 (29)	>99.84

COMPOUND: NITROBENZENE
CAS NO.: 98-95-3

INFLUENT CONCENTRATION - >10 - 100 mg/L

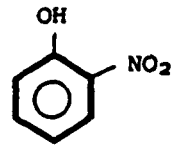
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	150 (3)	99.80
AS	202C	B	S	2200	97.8

COMPOUND: NITROPHENOL,2-

CAS No.: 88-75-5 FORMULA: C6 H5 N O3

COMPOUND TYPE: PHENOL-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 139.11	3B
MELTING POINT (C): 45	332A
BOILING POINT (C): 216	333A
VAPOR PRESSURE @ T(C), TORR: 0.19 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 2100 @ 20	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.76	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.322 E-4 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	99	0.34	mg/L	mg/gm	3B

COMPOUND: NITROPHENOL,2-
CAS NO.: 88-75-5

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F28	D	<3 (1)	>95.3
AS	6B	F2	I 28	<20 (6)	>46

COMPOUND: NITROPHENOL,2-
CAS NO.: 88-75-5

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F17	I 28	<20 (3)	>97.2
AS	6B	F17	I 28	59 (15)	74
AS	6B	F28	I 28	<35 (20)	>95.2

COMPOUND: NITROPHENOL,2-
CAS NO.: 88-75-5

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	187D	P	I 28	75 (10)	94.1
GAC	187D	P	I 28	11 (10)	99.13
PACT	187D	P	I 28	<10 (10)	>99.21
PACT	190E	P	I 28	<25	>98.1
RE	187D	P	I 28	350 (10)	72

COMPOUND: NITROPHENOL,4-

CAS No.: 100-02-7 FORMULA: C6 H5 N O3

COMPOUND TYPE: PHENOL-

STRUCTURE:

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 139.11	332A
MELTING POINT (C): 114.9	333A
BOILING POINT (C): 279	333A
VAPOR PRESSURE @ T(C), TORR: 0.75 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 16000 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.91	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 6.12 E-6 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	76.2	0.25	mg/L	mg/gm	3B
PX-21(AMOCO)	S	0.0302	0.236	moles/L	moles/gm	112A

COMPOUND: NITROPHENOL,4-
CAS NO.: 100-02-7

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F60	D	<25 (2)	>95.1
AS	6B	F17	I 28	140 (3)	79
AS	6B	F28	I 28	<50 (20)	>91.9
AS	187D	P	I 28	67 (10)	89
FIL	187D	P	I 28	490 (10)	22
GAC	187D	P	I 28	22 (10)	96.5
PACT	190E	B	I 28	<3.9	>99.46
PACT	187D	P	I 28	22 (10)	96.5
RE	187D	P	I 28	220 (10)	66

COMPOUND: NITROPHENOL,4-
CAS NO.: 100-02-7

INFLUENT CONCENTRATION - >1 - 10 mg/L

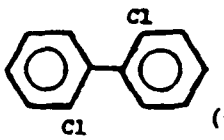
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F34	I 28	<50 (8)	>95.8

COMPOUND: PCB 1221

CAS No.: 11104-28-2 FORMULA: C12 H9 CL (51%)

COMPOUND TYPE: BIPHENYL-POLYCHLORINATED

STRUCTURE:



(typical)

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 200.7	378B
MELTING POINT (C):	
BOILING POINT (C):	
VAPOR PRESSURE @ T(C), TORR: 2.9 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.2 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.8 (EST)	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.24 E-4 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	242	0.70	mg/L	mg/gm	3B

COMPOUND: PCB 1221
CAS NO.: 11104-28-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

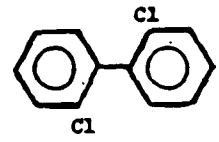
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
NA TO DATE					

COMPOUND: PCB 1232

CAS No.: 11141-16-5 FORMULA: C12 H9 CL (31%)

COMPOUND TYPE: BIPHENYL-POLYCHLORINATED

STRUCTURE:



(typical)

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 232.2	378B
MELTING POINT (C):	
BOILING POINT (C):	
VAPOR PRESSURE @ T(C), TORR: 2.2 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 1.45 (EST)	378B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 3.2 (EST)	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 5.234 E-2 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	630	0.73	mg/L	mg/gm	3B

COMPOUND: PCB 1232
CAS NO.: 11141-16-5

INFLUENT CONCENTRATION - 0 - 100 ug/L

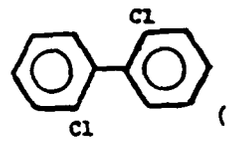
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
NA TO DATE					

COMPOUND: PCB 1242

CAS No.: 53469-21-9 FORMULA: C12 H7 CL3 (49%)

COMPOUND TYPE: BIPHENYL-POLYCHLORINATED

STRUCTURE:



(typical)

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 266.5	378B
MELTING POINT (C): -18.89	9B
BOILING POINT (C): 341.7	9B
VAPOR PRESSURE @ T(C), TORR: 0.0009 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.24 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.11	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.314 E-3 @ 20 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: PCB 1242
CAS NO.: 53469-21-9

INFLUENT CONCENTRATION - 0 - 100 ug/L

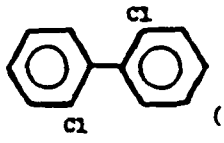
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
NA TO DATE					

COMPOUND: PCB 1248

CAS No.: 12672-29-6 FORMULA: C12 H6 CL4 (40%)

COMPOUND TYPE: BIPHENYL-POLYCHLORINATED

STRUCTURE:



(typical)

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 299.5	378B
MELTING POINT (C):	
BOILING POINT (C):	
VAPOR PRESSURE @ T(C), TORR: 0.0003 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.054 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 5.75 (EST)	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.265 E-2 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.

NA TO DATE

COMPOUND: PCB 1248
CAS NO.: 12672-29-6

INFLUENT CONCENTRATION - 0 - 100 ug/L

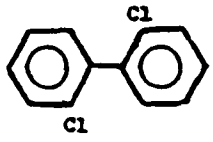
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
NA TO DATE					

COMPOUND: PCB 1254

CAS No.: 11097-69-1 FORMULA: C12 H5 CL5 (48%)

COMPOUND TYPE: BIPHENYL-POLYCHLORINATED

STRUCTURE:



(typical)

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 328.4	378B
MELTING POINT (C): 10	9B
BOILING POINT (C): 365	9B
VAPOR PRESSURE @ T(C), TORR: 1.8 E-4 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.012 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 6.03 (EST)	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 8.37 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB 400	S	1.02	0.74	ug/L	mg/gm	30A
FILTRASORB 400	C	0.73	1.14	ug/L	mg/gm	30A
NUCHAR-SA	C	32.20	1.159	ug/L	mg/gm	64C

COMPOUND: PCB 1254
CAS NO.: 11097-69-1

INFLUENT CONCENTRATION - 0 - 100 ug/L

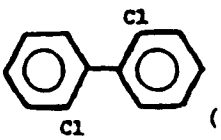
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
NA TO DATE					

COMPOUND: PCB 1260

CAS No.: 11096-82-5 FORMULA: C12 H3 CL7 (41%)

COMPOUND TYPE: BIPHENYL-POLYCHLORINATED

STRUCTURE:



(typical)

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 375.7	378B
MELTING POINT (C):	
BOILING POINT (C):	
VAPOR PRESSURE @ T(C), TORR: 0.9 E-4 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.027 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 7.14 (EST)	378B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.53 E-3 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: PCB 1260
CAS NO.: 11096-82-5

INFLUENT CONCENTRATION - 0 - 100 ug/L

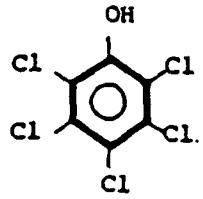
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
NA TO DATE					

COMPOUND: PENTACHLOROPHENOL

CAS No.: 87-86-5 FORMULA: C6 H CL5 O

COMPOUND TYPE: PHENOL-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 266.35	8B
MELTING POINT (C): 190	8B
BOILING POINT (C): 310	2A
VAPOR PRESSURE @ T(C), TORR: 0.005 @ 20	336B
SOLUBILITY IN WATER @ T(C), MG/L: 14 @ 20	8B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 5.01	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.16 E-6 @ 20 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	357B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	150	0.42	mg/L	mg/gm	3B

COMPOUND: PENTACHLOROPHENOL
CAS NO.: 87-86-5

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	57 (11)	32
AL	203A	P2	D	20 (11)	76
AS	203A	P	D	3 (11)	96.4
AS	204A	P	D	<6.3 (8)	>17
CAC	203A	P	D	50 (11)	40
TF	1B	F24	D	14 (6)	69
TF	203A	P	D	82 (11)	2

COMPOUND: PENTACHLOROPHENOL
CAS NO.: 87-86-5

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
TF	1B	F21	D	220 (6)	35
AS	6B	F32	I 28	<50 (9)	>58
AS	6B	F34	I 28	59 (8)	51
AL	192C	P	SF	<10	98.0
AS	192C	P	SF	82 (3)	84
RBC	192C	P	SF	90	82

COMPOUND: PENTACHLOROPHENOL
CAS NO.: 87-86-5

INFLUENT CONCENTRATION - >1 - 10 mg/L

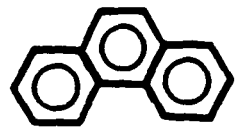
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F8	I 28	<50 (3)	>97.8
AS	202C	B	S	170	97.9

COMPOUND: PHENANTHRENE

CAS No.: 85-01-8 FORMULA: C14 H10

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 178.22	8B
MELTING POINT (C): 101	8B
BOILING POINT (C): 340	2A
VAPOR PRESSURE @ T(C), TORR: 0.00062 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 1.6 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.46	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 3.96 E-5 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	215	0.44	mg/L	mg/gm	3B

COMPOUND: PHENANTHRENE
CAS NO.: 85-01-8

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	40 (11)	58
AL	203A	P2	D	16 (11)	83
AS	1B	F6	D	13 (4)	82
AS	204A	P	D	<1.1 (8)	>97.2
AS	203A	P	D	4 (11)	95.8
CAC	203A	P	D	24 (11)	75
TF	203A	P	D	51 (11)	46
AS	6B	F31	I 28	<10 (7)	>80

COMPOUND: PHENANTHRENE
CAS NO.: 85-01-8

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
TF	1B	F52	D	<17 (6)	>91.5
AS	6B	F34	I 28	<25 (10)	>95.9
AS	202C	B	S	<10	>98.2

COMPOUND: PHENANTHRENE
CAS NO.: 85-01-8

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F33	I 28	<10 (14)	>99.70

COMPOUND: PHENOL

CAS No.: 108-95-2 FORMULA: C6 H6 O

COMPOUND TYPE: PHENOL-

STRUCTURE:

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 94.11	8B
MELTING POINT (C): 43	8B
BOILING POINT (C): 181.75	8B
VAPOR PRESSURE @ T(C), TORR: 0.3513 @ 25	8B
SOLUBILITY IN WATER @ T(C), MG/L: 9.3 E4 @ 25	8B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 1.46	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.3 E-6 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	21	0.54	mg/L	mg/gm	3B
FILTRASORB 300	C	29	0.33	mg/L	mg/gm	138C
PX-21(AMOCO)	C	0.0418	0.405	moles/L	moles/gm	112A

COMPOUND: PHENOL
CAS NO.: 108-95-2

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F31	D	<1 (6)	>98.3
AS	1B	F4	D	<1 (3)	>96.4
TF	1B	F21	D	1 (6)	98.2
AS	6B	F10	I 28	<12 (3)	>75
AS	6B	F2	I 28	<10 (7)	>64

COMPOUND: PHENOL
CAS NO.: 108-95-2

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	84 (11)	33
AL	203A	P2	D	18 (11)	86
AS	201B	F	D	20 (31)	92.6
AS	1B	F19	D	<1 (5)	>99.33
AS	1B	F28	D	1 (6)	99.89
AS	1B	F38	D	<1 (6)	>99.44
AS	204A	P	D	<14 (8)	>94.6
AS	203A	P	D	14 (11)	89
CAC	203A	P	D	99 (11)	21
TF	1B	F52	D	<47 (6)	>82
TF	203A	P	D	64 (11)	49
AS	6B	F29	I 28	<10 (16)	>98.2
AS	6B	F3	I 28	<10 (40)	>96.3
AS	6B	F31	I 28	<10 (11)	>96.3
AS	6B	F5	I 28	15 (7)	98.0
AL	192C	P	SF	<10 (2)	>99.0
AS	192C	P	SF	<10 (6)	>99.0
RBC	192C	P	SF	<10 (2)	>99.0

COMPOUND: PHENOL
CAS NO.: 108-95-2

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	6B	F14	I 28	<10 (3)	>99.75
AL	6B	F30	I 28	<13 (13)	>99.74
AS	6B	F11	I 28	<10 (3)	>99.82
AS	6B	F27	I 28	<10 (3)	>99.44
AS	6B	F28	I 28	58 (20)	98.1
AS	187D	P	I 28	43 (10)	95.8
GAC	187D	P	I 28	48 (10)	95.4
PACT	187D	P	I 28	<10 (10)	>99.03

COMPOUND: PHENOL
CAS NO.: 108-95-2

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	185E	F	I 29	<0.30	>97.3
AS	6B	F17	I 28	<10 (3)	>99.94
PACT	190E	B	I 28	<1.8	>99.991

COMPOUND: PHENOL
CAS NO.: 108-95-2

INFLUENT CONCENTRATION - >100 - 1000 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
SBR	227C	P	HL	1 (1)	99.81
AS	189C	B	I U	5.2	98.9
AS	185E	F	I 29	<0.5	>99.56
AS	6B	F33	I 28	<0.01 (13)	>99.999
AS	6B	F8	I 28	<0.01 (3)	>99.995
AS	202C	B	S	<0.01	>99.994
AS	226B	P	S	<0.5 (6)	>99.95
AnFF	230A	B	S	<10	>98.97
AnFF	231A	P	S	0.07	99.98
AnFF	231A	P	S	0.01	99.999

COMPOUND: PHENOL
CAS NO.: 108-95-2

INFLUENT CONCENTRATION - >1000 mg/L

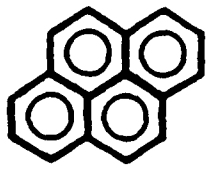
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AnFF	230A	B	S	<1	>99.95
AnFF	231A	P	S	0.03	99.998
AnFF	231A	P	S	0.7	99.98

COMPOUND: PYRENE

CAS No.: 129-00-0 FORMULA: C16 H10

COMPOUND TYPE: AROMATIC-POLYNUCLEAR

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 202.24	332A
MELTING POINT (C): 156	332A
BOILING POINT (C): 393	333A
VAPOR PRESSURE @ T(C), TORR: 0.26 @ 100	336B
SOLUBILITY IN WATER @ T(C), MG/L: 0.13 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 5.32	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 6.77 E-3 @ 100 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: PYRENE
CAS NO.: 129-00-0

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F52	D	5 (1)	80
AS	204A	P	D	<2 (8)	>93.3
AS	6B	F5	I 28	<12 (7)	>86
GAC	188D	P	I 33	<10 (9)	>79

COMPOUND: PYRENE
CAS NO.: 129-00-0

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	203A	P1	D	36 (11)	65
AL	203A	P2	D	25 (11)	76
AS	203A	P	D	5 (11)	95.2
CAC	203A	P	D	12 (11)	88
TF	203A	P	D	48 (11)	54
AS	6B	F33	I 28	<10 (14)	>99.00
FIL	188D	P	I 33	80 (9)	27

COMPOUND: PYRENE
CAS NO.: 129-00-0

INFLUENT CONCENTRATION - >1 - 10 mg/L

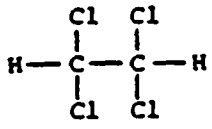
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
CAC	188D	P	I 33	110 (8)	94.5

COMPOUND: TETRACHLOROETHANE,1,1,2,2-

CAS No.: 79-34-5 FORMULA: C2 H2 CL4

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 167.85	3B
MELTING POINT (C): -44	332A
BOILING POINT (C): 146.5	332A
VAPOR PRESSURE @ T(C), TORR: 5	9B
SOLUBILITY IN WATER @ T(C), MG/L: 2857 @ 25	333A
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.56	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1:	

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	10.6	0.37	mg/L	mg/gm	3B

COMPOUND: TETRACHLOROETHANE,1,1,2,2-
CAS NO.: 79-34-5

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F4	D	3 (2)	93.5

COMPOUND: TETRACHLOROETHANE,1,1,2,2-
CAS NO.: 79-34-5

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F32	I 28	<10 (2)	>98.4

COMPOUND: TETRACHLOROETHANE,1,1,2,2-
CAS NO.: 79-34-5

INFLUENT CONCENTRATION - >100 - 1000 mg/L

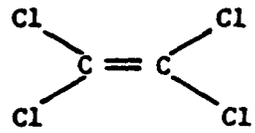
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	202C	B	S	11	94.5

COMPOUND: TETRACHLOROETHYLENE

CAS No.: 127-18-4 FORMULA: C2 CL4

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 165.83	3B
MELTING POINT (C): -19	333A
BOILING POINT (C): 121 @ 760	333A
VAPOR PRESSURE @ T(C), TORR: 19 @ 25	336A
SOLUBILITY IN WATER @ T(C), MG/L: 145 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.88	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 2.87 E-2 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	50.8	0.56	mg/L	mg/gm	3B
FILTRASORB 400	C	10388.8	0.4579	ug/L	ug/gm	73A
WESTVACO WV-G	C	7524.3	0.5017	ug/L	ug/gm	73A
FILTRASORB 300	G	82.0	0.287	mg/L	mg/gm	94C

COMPOUND: TETRACHLOROETHYLENE
CAS NO.: 127-18-4

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	<10 (6)	>80
AS	201B	F	D	8 (22)	89.5
AS	1B	F1	D	6 (4)	93.0
AS	1B	F3	D	<8 (4)	>85
AS	1B	F36	D	2 (5)	97.5
AS	1B	F60	D	1 (4)	96.0
TF	1B	F24	D	<1 (4)	>96.9
TF	1B	F37	D	3 (5)	94.3
TF	1B	F40	D	<6 (6)	>92.7
AIRS	207B	P	G	<0.5 (1)	>98.3
AIRS	208B	P	G	0.2 (1)	99.17
AIRS	220B	P	G	<0.2 (1)	>99.76
AIRS	221B	P	G	<0.5 (1)	>95.8
AIRS	222B	P	G	<0.2 (1)	>94.3

COMPOUND: TETRACHLOROETHYLENE
CAS NO.: 127-18-4

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F17	D	5 (5)	96.7
AS	1B	F4	D	100 (4)	83
AS	1B	F59	D	48 (6)	79
TF	1B	F17	D	26 (5)	83
AIRS	223B	F	G	0.8 (1)	99.43
AIRS	214B	P	G	0.9 (1)	99.31
AIRS	217B	P	G	0.3 (1)	99.73
AL	6B	F30	I 28	<10 (13)	>98.6
AS	6B	F9	I 28	<10 (15)	>97.9

COMPOUND: TETRACHLOROETHYLENE
CAS NO.: 127-18-4

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F28	D	440 (6)	85

COMPOUND: TETRACHLOROETHYLENE
CAS NO.: 127-18-4

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F9	I 28	230 (3)	99.04

COMPOUND: TOLUENE

CAS No.: 108-88-3 FORMULA: C7 H8

COMPOUND TYPE: AROMATIC-

STRUCTURE:

CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 92.14	9B
MELTING POINT (C): -95	9B
BOILING POINT (C): 110.6	8B
VAPOR PRESSURE @ T(C), TORR: 36.7 @ 30	8B
SOLUBILITY IN WATER @ T(C), MG/L: 515 @ 20	8B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.69	9B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 5.93 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	26.1	0.44	mg/L	mg/gm	3B
HYDRODARCO C	S(AS-E)	1.2	0.47	ug/L	ug/mg	200B
NUCHAR-WV	S(I-36)	0.944	0.464	ug/L	mg/gm	170C

COMPOUND: TOLUENE
CAS NO.: 108-88-3

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PER REM
AS	1B	F17	D	2 (5)	97.6
AS	1B	F18	D	<1 (5)	>97.4
AS	1B	F4	D	<1 (4)	>98.0
AS	1B	F5	D	<1 (6)	>97.3
TF	1B	F21	D	2 (5)	97.2
TF	1B	F37	D	<1 (6)	>98.2
AIRS	224B	P	G	<0.5 (1)	>98.9

COMPOUND: TOLUENE
CAS NO.: 108-88-3

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	<32 (6)	>96.1
AS	201B	F	D	57 (32)	87
AS	1B	F14	D	<4 (4)	>96.4
AS	1B	F30	D	4 (6)	99.48
AS	1B	F51	D	<10 (6)	>96.4
AS	206B	P	D	<0.6 (20)	>99.76
TF	1B	F39	D	7 (4)	97.8
AS	6B	F1	I 28	<10 (24)	>99.73
AS	6B	F19	I 28	<10 (3)	>94.7
AS	6B	F28	I 28	<10 (20)	>90.9
AS	6B	F33	I 28	<10 (14)	>97.8
AS	200B	B	S	0.8 (10)	99.30
PACT	200B	B	S	0.3 (13)	99.75

COMPOUND: TOLUENE
CAS NO.: 108-88-3

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F28	D	9 (6)	99.81
AL	6B	F14	I 28	<10 (3)	>99.74
AS	6B	F3	I 28	<18 (41)	>99.80
AS	6B	F31	I 28	<10 (15)	>99.89
AS	6B	F5	I 28	<10 (7)	>99.50
AS	6B	F7	I 28	<10 (3)	>99.33

COMPOUND: TOLUENE
CAS NO.: 108-88-3

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F20	I 28	73 (3)	99.84
AS	6B	F34	I 28	1500 (10)	92.5
AS	6B	F8	I 28	76 (3)	99.90
AS	202C	B	S	<10	>99.98

COMPOUND: TOLUENE
CAS NO.: 108-88-3

INFLUENT CONCENTRATION - >100 - 1000 mg/L

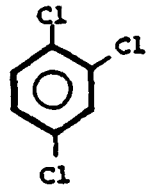
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	226B	P	S	<0.3 (7)	>99.85

COMPOUND: TRICHLOROBENZENE,1,2,4-

CAS No.: 120-82-1 FORMULA: C6 H3 CL3

COMPOUND TYPE: AROMATIC-

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 181.45	3B
MELTING POINT (C): 17	332A
BOILING POINT (C): 213.5	333A
VAPOR PRESSURE @ T(C), TORR: 0.43 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 30	379B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.26	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 1.42 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	157	0.31	mg/L	mg/gm	3B
HYDRODARCO C	S(AS-E)	6.2	0.44	ug/L	ug/mg	200B
MLSS	C	0.00039	1.24	ug/L	ug/mg	200B

COMPOUND: TRICHLOROBENZENE,1,2,4-
CAS NO.: 120-82-1

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	14 (13)	80
AS	1B	F36	D	8 (6)	92.0
TF	1B	F40	D	<5 (3)	>91.7

COMPOUND: TRICHLOROBENZENE,1,2,4-
CAS NO.: 120-82-1

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	6B	F34	I 28	<10 (10)	>96.0
AS	200B	B	S	12 (14)	90.0
PACT	200B	B	S	2.1 (12)	98.0

COMPOUND: TRICHLOROBENZENE,1,2,4-
CAS NO.: 120-82-1

INFLUENT CONCENTRATION - >1 - 10 mg/L

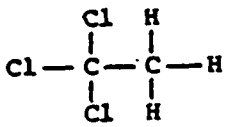
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F32	D	89 (4)	91.9

COMPOUND: TRICHLOROETHANE,1,1,1-

CAS No.: 71-55-6 FORMULA: C2 H3 CL3

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 133.41	9B
MELTING POINT (C): -30.4	8B
BOILING POINT (C): 74.1	8B
VAPOR PRESSURE @ T(C), TORR: 126 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 4500 @ 20	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 4.17	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 4.92E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	2.48	0.34	mg/L	mg/gm	3B
FILTRASORB 400	C	1245	0.4696	ug/L	ug/gm	73A
FILTRASORB 300	G	29.99	0.673	mg/L	mg/gm	94C
NUCHAR-WV	S(I-36)	5.14	0.489	ug/L	mg/gm	170C

COMPOUND: TRICHLOROETHANE,1,1,1-
CAS NO.: 71-55-6

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AL	1B	F55	D	<10 (5)	>90.0
AS	201B	F	D	21 (6)	79
AS	1B	F12	D	10 (4)	89
AS	1B	F14	D	<5 (4)	>95.0
AS	1B	F17	D	<1 (5)	>98.4
AS	1B	F3	D	<10 (4)	>84
AS	1B	F7	D	<9 (5)	>84
TF	1B	F17	D	5 (5)	92.2
TF	1B	F40	D	2 (5)	92.6
AIRS	207B	P	G	<0.5 (1)	>97.5
AIRS	211B	P	G	<1 (1)	>98.8
AIRS	217B	P	G	<0.3 (1)	>97.0
AIRS	219B	P	G	<0.5 (1)	>96.7
AL	6B	F14	I 28	<10 (3)	>56

COMPOUND: TRICHLOROETHANE,1,1,1-
CAS NO.: 71-55-6

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F37	D	12 (6)	90.0
AS	1B	F38	D	5 (6)	96.2
AS	1B	F6	D	54 (5)	89
AS	1B	F60	D	28 (6)	94.3
AS	206B	P	D	<0.3 (20)	>99.77
TF	6B	F11	D	13 (6)	92.4
TF	1B	F37	D	2 (6)	98.3
AIRS	211B	P	G	1.7 (1)	99.50
AIRS	222B	P	G	1.1 (1)	99.75
AIRS	205C	P	I U	7	96.8
AS	6B	F1	I 28	<10 (3)	>98.9
~~AS~~	~~205C~~	~~P~~	~~I U~~	~~7~~	~~96.8~~

COMPOUND: TRICHLOROETHANE,1,1,1-
CAS NO.: 71-55-6

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F28	D	850 (6)	87

COMPOUND: TRICHLOROETHANE,1,1,1-
CAS NO.: 71-55-6

INFLUENT CONCENTRATION - >100 - 1000 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
AS	202C	B	S	1.6	98.6

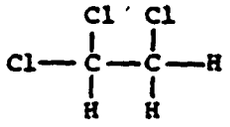
COMPOUND: TRICHLOROETHANE,1,1,2-

CAS No.: 79-00-5

FORMULA: C2 H3 CL3

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 133.42	8B
MELTING POINT (C): -36.5	8B
BOILING POINT (C): 113.77	8B
VAPOR PRESSURE @ T(C), TORR: 24 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 4500 @ 20	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.17	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 7.74 E-4 @ 20 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	4B
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	NA
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	5.81	0.60	mg/L	mg/gm	3B

COMPOUND: TRICHLOROETHANE,1,1,2-
CAS NO.: 79-00-5

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F9	D	<5 (3)	>88

COMPOUND: TRICHLOROETHANE,1,1,2-
CAS NO.: 79-00-5

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	206B	P	D	28 (20)	79
AS	6B	Fl	I 28	<18 (3)	>97.1

COMPOUND: TRICHLOROETHANE,1,1,2-
CAS NO.: 79-00-5

INFLUENT CONCENTRATION - >1 - 10 mg/L

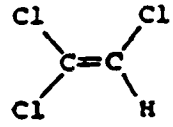
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	187D	P	I 28	240 (8)	94.2
FIL	187D	P	I 28	2300 (8)	43
GAC	187D	P	I 28	25 (8)	99.38
PACT	190E	B	I 28	<4.2	>99.68
PACT	187D	P	I 28	150 (8)	96.4
RE	187D	P	I 28	<10 (7)	>99.75

COMPOUND: TRICHLOROETHYLENE

CAS No.: 79-01-6 FORMULA: C2 H CL3

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 131.4	8B
MELTING POINT (C): -73	8B
BOILING POINT (C): 87	8B
VAPOR PRESSURE @ T(C), TORR: 75 @ 25	336B
SOLUBILITY IN WATER @ T(C), MG/L: 1110 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 2.29	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 11.7 E-3 @ 25 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	4B
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	NA
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
FILTRASORB	C	28.0	0.62	mg/L	mg/gm	3B
FILTRASORB 400	C	3389.7	0.4162	ug/L	ug/gm	73A
WESTVACO WV-G	C	3261.9	0.4073	ug/L	ug/gm	73A
FILTRASORB 300	C	61.09	0.562	mg/L	mg/gm	94C
NUCHAR-WV	S(I-36)	2.43	0.615	mg/L	mg/gm	170C
WESTVACO WV-W	C	1062	0.5005	ug/L	ug/gm	73A
HD-3000	C	712.8	0.4702	ug/L	ug/gm	73A

COMPOUND: TRICHLOROETHYLENE
CAS NO.: 79-01-6

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	201B	F	D	13 (6)	87
AS	1B	F10	D	<1 (5)	>98.5
AS	1B	F20	D	<1 (6)	>96.7
AS	1B	F37	D	2 (6)	97.6
AS	1B	F9	D	<5 (4)	>89
TF	1B	F10	D	<1 (5)	>98.5
TF	1B	F24	D	<1 (5)	>98.4
TF	1B	F37	D	<1 (6)	>98.8
AIRS	223B	F	G	<0.5 (1)	>98.2
AIRS	222B	P	G	<0.3 (1)	>99.21
AIRS	207B	P	G	<0.5 (1)	>98.7
AIRS	208B	P	G	0.7 (1)	99.03
AIRS	212B	P	G	0.4 (1)	99.60
AIRS	215B	P	G	<0.5 (1)	>98.0
AIRS	221B	P	G	<0.5 (1)	>99.44
AIRS	205C	P	I U	<1	>97.2
AL	6B	F6	I 28	<10 (3)	>81
AS	6B	F17	I 28	<10 (3)	>81
AS	6B	F32	I 28	<10 (5)	>89
AS	6B	F9	I 28	<10 (3)	>89

COMPOUND: TRICHLOROETHYLENE
CAS NO.: 79-01-6

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F14	D	<3 (4)	>97.3
AS	1B	F38	D	2 (6)	99.23
AS	1B	F4	D	37 (6)	92.6
AS	1B	F6	D	64 (6)	87
AS	206B	P	D	<1.5 (20)	>98.6
TF	1B	F39	D	<1 (5)	>99.33
AIRS	209B	P	G	0.8 (1)	99.58
AIRS	211B	P	G	3.1 (1)	98.6
AIRS	216B	P	G	2.1 (1)	98.9
AIRS	217B	P	G	1.2 (1)	99.69
AIRS	219B	P	G	0.5 (1)	99.58
AIRS	220B	P	G	0.2 (1)	99.92
AS	6B	F20	I 28	<10 (3)	>94.1

COMPOUND: TRICHLOROETHYLENE
CAS NO.: 79-01-6

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AIRS	211B	P	G	7.7 (1)	99.30

COMPOUND: TRICHLOROETHYLENE
CAS NO.: 79-01-6

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	202C	B	S	210	99.78

COMPOUND: TRICHLOROETHYLENE
CAS NO.: 79-01-6

INFLUENT CONCENTRATION - >1000 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	186D	B	SF	18	99.00

COMPOUND: TRICHLOROETHYLENE
CAS NO.: 79-01-6

INFLUENT CONCENTRATION - >100 - 1000 mg/L

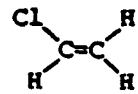
TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (mg/L)	PERCENT REMOVAL
WOX	186D	B	SF	6.5 (2)	99.00

COMPOUND: VINYL CHLORIDE

CAS No.: 75-01-4 FORMULA: C2 H3 CL

COMPOUND TYPE: HYDROCARBON-HALOGENATED

STRUCTURE:



CHEMICAL AND PHYSICAL PROPERTIES	REF.
MOLECULAR WEIGHT: 62.50	9B
MELTING POINT (C): -153.8	8B
BOILING POINT (C): -13.37	8B
VAPOR PRESSURE @ T(C), TORR: 2660 @ 25	8B
SOLUBILITY IN WATER @ T(C), MG/L: 1.1 @ 25	336B
LOG OCTANOL/WATER PARTITION COEFFICIENT: 0.60	379B
HENRY'S LAW CONSTANT, ATM x M3 MOLE-1: 6.39 @ 20 C	336B

ENVIRONMENTAL DATA	REF.
CHRONIC NONCARCINOGENIC SYSTEMIC TOXICITY	NA
RISK ESTIMATES FOR CARCINOGENS	NA
DRINKING WATER HEALTH ADVISORIES/STANDARDS:	346B
WATER QUALITY CRITERIA	345B
AQUATIC TOXICITY DATABASE	5B

FREUNDLICH ISOTHERM DATA

ADSORBENT	MATRIX	K	1/N	Ce UNITS	X/M UNITS	REF.
NA TO DATE						

COMPOUND: VINYL CHLORIDE
CAS NO.: 75-01-4

INFLUENT CONCENTRATION - 0 - 100 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F30	D	<20 (4)	>80
AIRS	217B	P	G	<0.5 (1)	>93.1
AS	6B	F11	I 28	<10 (3)	>80

COMPOUND: VINYL CHLORIDE
CAS NO.: 75-01-4

INFLUENT CONCENTRATION - >100 - 1000 ug/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS + AL	6B	F16	I 28	<50 (3)	>95.0

COMPOUND: VINYL CHLORIDE
CAS NO.: 75-01-4

INFLUENT CONCENTRATION - >1 - 10 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F6	D	100 (6)	94.1
AS	6B	F9	I 28	<52 (18)	>98.6

COMPOUND: VINYL CHLORIDE
CAS NO.: 75-01-4

INFLUENT CONCENTRATION - >10 - 100 mg/L

TECHNOLOGY	REF.	SCALE	SOURCE MATRIX	EFFLUENT CONCENTRATION (ug/L)	PERCENT REMOVAL
AS	1B	F57	D	3900 (6)	92.9

SECTION 8

WERL DATABASE BIBLIOGRAPHY

The WERL Database contains two sets of bibliographies. The first simply lists the bibliographical citation. The second are bibliographies that include additional information. The additional information might include system operating or design parameters for the specific study. The files containing the bibliography only, or those as of yet without any additional information were not included so as to keep this section to a manageable size. The bibliographies are presented in numerical order.

Copies of all of the references used in the database are retained at WERL Office of Research and Development. More information can be obtained by contacting:

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U.S. Environmental Protection Agency
Chemicals and Chemical Products Branch
Cincinnati, OH 45268
684-7503 (FTS)
(513) 569-7503 (commercial)

This section contains those bibliographies which contain the expanded information.

1B U.S. Environmental Protection Agency, "Fate of Priority Pollutants in Publicly Owned Treatment Works", EPA Report No. EPA 440/1-82/303, Effluent Guidelines Division, EPA, Washington, D.C., September 1982.

Each of 50 POTW's were sampled for approximately 6 days and the samples were analyzed for the priority pollutants. The data used in the tables are averages of only those samples for which the influent concentration was 20 ug/L or higher. Data in the reference are also available on the priority pollutant concentration in various sludge streams.

Additional information on the POTW's is presented in the following (flow diagrams available in reference):

Plant No.	* S.T.	Flow mg/d	Ind. Flow-%	BOD-mg/L Inf.	BOD-mg/L Eff.	SS-mg/L Inf.	SS-mg/L Eff.
1	AS	91	30	201	13	139	20
2	AS	8.1	2	95	14	97	9
3	AS	10.6	10	131	14	266	44
4	AS	84	18	152	22	164	43
5	AS	22	12	138	13	147	12
6	AS	7.1	35	263	18	632	27
7	AS	49	15	169	29	135	18
8	AS	23	30	238	42	205	69
9	AS	52	7	113	5	149	14
10	AS	16.5	5	242	16	222	16
10	TF	6.9	5	342	23	222	14
11	TF	38	4	99	27	171	14
12	AS	38	50	105	10	178	14
13	AS	15	35	69	15	150	13
14	AS	11	25	281	13	190	9
15	TF	6.6	25	115	13	131	19
16	TF+AS	145	16	226	11	212	16
17	TF	5.0	45	194	13	129	9
17	AS	9.9	45	194	9	129	8
18	AS	63	10	208	37	268	21
19	AS	68	20	379	45	187	29
20	AS	119	19	247	21	421	13
21	TF	23	15	238	59	260	28
22	TF+AS	14	25	245	39	159	22
23	TF+AL	27	11	130	26	78	18
24	TF	7.1	30	275	13	111	31
25	AS	44	10	329	8	182	2
26	AS	212	8	108	17	113	6
27	AS	46	3	173	15	186	11
27	TF	155	3	173	44	186	36
28	AS	77	50	523	20	399	24
29	TF	5.6	24	187	63	98	44
30	AS	20	23	308	23	55	7
31	AS	31	10	144	12	133	19
32	AS	9.8	25	149	12	109	15
33	RBC	1.6	55	120	9	33	14
34	AS	15	13	264	4	104	11
35	AS	14	15	222	42	147	22
36	AS	42	65	435	87	327	38
37	AS	45	30	303	25	206	7

Plant No.	* S.T.	Flow mg/d	Ind. Flow-%	BOD-mg/L Inf.	BOD-mg/L Eff.	SS-mg/L Inf.	SS-mg/L Eff.
37	TF	20	30	303	90	206	22
38	AS	24	15	292	19	156	5
39	TF	8.4	5	323	32	90	20
40	TF	8.5	50	236	55	138	54
51	AS	40	3	299	4	508	9
52	TF	1.3	1	145	43	85	23
53	TF+AS	5.5	48	177	2	137	9
54	AS	15	7	137	6	253	50
55	AL	28	61	162	8	453	16
56	AS+FIL	16	27	94	15	430	5
57	AS	5.5	15	257	12	583	49
58	AS	22	35	93	16	116	11
59	AS	30	18	159	7	503	15
60	AS	3.2	26	557	17	442	33

* Secondary Treatment System

3B Dobbs, R.A., and J.M. Cohen, "Carbon Adsorption Isotherms for Toxic Organics", EPA Report No. EPA 600/8-8C/023, Water Engineering Research Laboratory, Cincinnati, OH, April 1980.

The isotherms were conducted using 200/400 mesh pulverized Filtrasorb 300 activated carbon. The compounds were added to distilled water and the contact time was 2 hours. For various compound the isotherms were run at several pH's, although only one value is presented in the physical chemical properties report. Those compounds are:

Acridine orange
Acridine yellow
Adenine
o-Ansidine
Benzidine Dihydrochloride
Benzoic Acid
5-Bromouracil
Parachlorometa Cresol
5-Chlorouracil
Cytosine
Phenylmercuric Acetate
2,4,6-Trichlorophenol
2,4-Dimethylphenol
Dimethylphenylcarbinol
4,6-Dinitro-o-cresol
2,4-Dinitrophenol
5-Fluorouracil
Guanine
o-Naphthylamine
2-Nitrophenol
4-Nitrophenol
p-Nonylphenol
Pentachlorophenol

200B Weber, W.J., Jr., and B.E. Jones, "Toxic Substance Removal in Activated Sludge and PAC Treatment Systems", EPA Report No. EPA/600/52-86/045, EPA Water Engineering Research Laboratory, Cincinnati, OH, June 1986.

All data on table for activated sludge was from systems operated at:

SRT = 6 days
HRT = 5.5 hours
MLSS = 3500 mg/L

Additional data available in reference at other SRT's and MLSS's. Data also available on partitioning of pollutants to air and sludge.

Data in table for PACT was from systems operated at:

SRT = 6 days
HRT = 5.5 hours
MLSS = 3900 mg/L (excluding PAC)
PAC = 50 mg/L of Hydrodarco C

with two exceptions:

Lindane; SRT = 3 days MLSS = 2100 mg/L
Toluene; PAC = 200 mg/L

Additional data available in reference at other PAC dosages.

201B U.S. Environmental Protection Agency "Fate of Priority Pollutants in Publicly Owned Treatment Works - 30 Day Study", EPA Report No. EPA 440/1-82/302, Effluent Guidelines Division, EPA, Washington, D.C., July 1982.

A POTW in Chattanooga, TN was sampled for 6 consecutive days and six months later it was sampled for 30 consecutive days (24-hour composites). The POTW is a conventional activated sludge plant with an average flow of 48 mgd. Industry contributes about 50 percent of the flow and 65 percent of the BOD.

Primary Clarifiers:	HRT = 1 hour
	1,600 gpd/sf
Aeration Basins:	HRT = 5 hours
	MLSS = 2,500 mg/L
Secondary Clarifiers:	HRT = 2.5 hours
	750 gpd/sf

	36-day average mg/L	
	BOD	SS
	---	---
Influent	326	249
Effluent	45	34

The data presented in this database are averages of only those samples for which the influent concentration was 20 ug/L or higher. There is also data in the reference on the priority pollutant concentrations in various sludge streams.

202C Kincannon, D.F., A. Weinert, R. Padorr, and E.L. Stover, "Predicting Treatability of Multiple Organic Priority Pollutant Wastewaters from Single-Pollutant Treatability Studies", Proceedings of the 37th Purdue Industrial Waste Conference, Purdue University, Lafayette, IN, 1982.

Data reported on tables generated at:

HRT = 8 hours
SRT = 6 days
Influent BOD = 250 mg/L (approx.)
Effluent BOD < 5 mg/L all tests

All data from feeding single p.p. with synthetic waste. Systems acclimated for 1 month followed by 60 days of sampling and analysis. Data also available on removal mechanisms.

Other references certain data at other SRT's and for combinations of 3 p.p.

(Additional papers from same study in: JWPCF, January 1983; JWPF, February 1983 and 36th Purdue IWC Proceedings)

203A Hannah, S.A., B.M. Austern, A.E. Eralp, and R.H. Wise, "Comparative Removal of Toxic Pollutants by Six Wastewater Treatment Processes", Journal WPCF, Vol. 58, No. 1, pp 27-34, (Jan. 1986).

Activated Sludge Pilot Plant (1.5 gpm)

Primary Clarifier:	HRT = 3.2 hours
	Overflow rate = 12.4 m3/m2-d
Aeration Basins:	MLSS = 2000 mg/L (approx.)
	HRT = 7.5 hours
	SRT = 7 days
	F/M = 0.5 kg COD/kg MLSS-day
Secondary Clarifier:	N.A.

High Rate Trickling Filter (1.5 gpmn)

Primary Clarifier:	Same as for A.S.
Filter:	1.5 to 3 in. crushed slag
	12.4 m3/m2-d surface loading
	6.6 m3/m3-d volumetric loading
Secondary Clarifier:	N.A.

Chemical Assisted Clarification (2 gpm)

Rapid Mix:	HRT = 48 seconds
Flocculation:	HRT = 52 minutes
Clarifier:	Overflow rate 15.2 m3/m2-d
	Chemical feed = 250 mg/L of alum

Aerated Lagoon (P-1)
Depth = 1.2 m
Volume = 4.8 m3
HRT = 6.4 days

Faculative Lagoon (P-2)
Depth = 1.2 m
Volume = 4.8 m3
HRT = 25.6 days

The four biological pilot plants were operated 30 days before sampling was initiated (8-month study).

Influent COD averaged 344 mg/L
COD removals averaged:
activated sludge = 82%
trickling filter = 40%
clarification (w chem.) = 49%
aerated lagoon = 60%
facultative lagoon = 65%

204A Petrasek, A.C., I.J. Kugelman, B.M. Austern, T.A. Pressley, L.A. Winslow, and R.H. Wise, "Fate of Toxic Organic Compounds in Wastewater Plants", Journal WPCF, Vol. 55, No. 10, pp 1286-1296, (October 1983).

The pilot plant consisted of a sewer simulator, grit chamber, primary clarifier and activated sludge operated at 1.39 gpm for 312 days.

Activated Sludge: SRT = 7 days
MLSS = 1900 mg/L
F:M = 0.6 kg COD/kg MLSS

Effluent COD = 76 mg/L, 89% removal
Effluent SS = 26 mg/L, 95% removal

205C Pekin, T., and A. Moore, "Air Stripping of Trace Volatile Organics from Wastewater", Proceedings of the 37th Industrial Waste Conference, Purdue UNiversity, Lafayette, IN, 1982.

Pilot column was 10.5 ft. high (7 ft. of liquid) and 6.4 inches I.D. with wastewater flowrate of 0.16 gpm.

HRT = 80 minutes (approx.)

Data on table from air/water ratio = 50. Other data available at A/W ratios from 22 to 125. Data also available on packed tower operation.

206B Petrasek, A.C., B.M. Austern, and T.W. Neiheisel, "Removal and Partitioning of Volatile Organic Priority Pollutants in Wastewater Treatment", Presented at the Ninth U.S. Japan Conference on Sewage Treatment Technology, Tokyo, Japan, September, 1983.

Twelve month pilot plant study at 33.5 gpm

Primary Clarifier:	670 gpd/ft2
Aeration Basin:	HDT = 7.5 hours
	SRT = 5.9 days
	MLSS = 2870 mg/L
	SVI = 153 ml/gm
Secondary Clarifier:	450 gpd/ft2

Secondary Effluent:

TSS = 30 mg/L	93% Removal
COD = 77 mg/L	87% Removal

Data also available in reference on priority pollutant concentration on sludges and aeration basin off-gas.

207B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping - Valley Park, MO, March 1985", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Pilot plant 2 ft. I.D., 24 ft. tall with 18 ft. of 1 in. plastic saddles. Data collected at 10 depths for each run. Six runs with air-water ratio varied from 0.9 to 39.

Data on table from air-water = 39 with liquid loading = 20 gpm/ft2.

208B Cummins, M.D., "Field Evaluation of Trichloroethylene Removal by Packed Column Air Stripping - Wausau, WI, September 1982", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at air-water ratios from 5 to 85 and sampled at 1 ft. intervals (6 runs).

Data in table for air-water ratio = 45 at liquid loading = 17 gpm/ft2.

209B Cummins, M.D., "Field Evaluation of Trichloroethylene Removal by Packed Column Air Stripping - Washington, NJ, August 1982", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at air-water ratios from 5 to 80 and sampled at 1 ft. intervals (6 runs).

Data in table for air-water ratio = 80 at liquid loading = 11 gpm/ft2.

210B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping for THM Removal - Virginia Beach, VA, August 1983", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at four air-water ratios from 20 to 60 and at four air pressure drop gradients from 1/16 in. of H_2O to 1/4 in. of H_2O per ft. of column height.

Data in table for air-water ratio = 20 at air pressure drop of 1/16 in. of H_2O per ft. of column height.

211B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping - Twin Cities Army Ammunition Plant, June 1983", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at four air-water ratios (15-40) and four air pressure drop gradients. Data obtained on two different wells.

Data in table for air-water ratio = 44 and air pressure drop of 1/16 in. of H_2O per ft. of column height.

212B Cummins, M.D., "Field Evaluation of Trichloroethylene Removal by a Packed Column Air Stripping - Rockaway Township, NJ, August 1982", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at six air-water ratios (5 to 100) with liquid rates from 63 to 9 gpm/ft2.

Data on table for air-water ratio = 100 with liquid rate of 9 gpm/ft2 and an air flow of 120 scfm/ft2

213B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping - Riviera Beach, FL, February 1984", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at six air-water ratios (9.1 to 100).

Data on table for air-water ratio = 37 with liquid loading = 0.012 m3/m2-sec. and air loading = 0.43 m3/m2-sec.

214B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping - Pensacola, FL, November 1986", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at six air-water ratios (1.5 to 35) with data on table from air-water ratio = 35 with a liquid loading = 0.020 m3/m2-sec. and an air loading = 0.70 m3/m2-sec.

215B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping - Palm Beach Gardens, FL, April 1984", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at six air-water ratios (5.5 to 77) with data on table from air-water ratio = 16 with water loading = 0.022 m3/m2-sec. and air loading = 0.36 m3-m2.sec.

216B "Field Evaluation of Trichloroethylene Removal by Packed Column Air Stripping - Olean, NY, May 1982", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at six air-water ratios (10-150) with data on table for air-water ratio = 88 with liquid loading = 12 gpm/ft2 and air loading = 140 scfm/ft2.

217B Cummins, M.D., "Field Evaluation of Trichloroethylene Removal by Packed Column Air Stripping - Lansdale, PA, August 1982", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at six air-water ratios (5-83) with data in table for air-water ratio = 83 with liquid loading = 11 gpm/ft2 and air loading = 120 scfm/ft2.

218B Cummins, M.D., "Removal of Ethylene Dibromide (EDB) from Contaminated Ground Water by Packed Column Air Stripping - Lake Wales, FL, April 1984", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Operated at three air-water ratios (53 to 182) with data on table for air-water ratio = 90 with liquid loading = 0.0101 m3/m2-sec. and air loading = 0.91 m3/m2-sec.

219B Cummins, M.D., "Field Evaluation of Trichloroethylene Removal by Packed Column Air Stripping - Hartland, WI, September 1982", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Data collected at six air-water ratios (5 to 84) with data on table for air-water ratio = 43 with liquid loading = 17 gpm/ft2 and air loading = 98 scfm/ft2.

220B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping - Glen Cove, NY, December 1982", Internal Report, TDS, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Data collected at six air-water ratios (6-86) with data on table for air-water rates = 86 with liquid loading = 0.007 m3/m2-sec. and air loading = 0.63 m3/m2-sec.

Data also available on 2 in. plastic saddles.

221B Cummins, M.D., "Field Evaluation of Trichloroethylene Removal by Packed Column Air Stripping - Delavan, WI, October 1982", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref 207B.

Data collected at six air-water ratios (5-78) with data on table for air-water ratio = 48 with liquid loading = 16 gpm/ft2 and air loading = 100 scfm/ft2.

222B Cummins, M.D., "Field Evaluation of 1,1,1-Trichloroethane Removal by Packed Column Air Stripping - Dedham, MA, August 1982", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Data collected at six air-water ratios (5 to 80) with data on table for air-water ratio = 80, with liquid loading = 12 gpm/ft2 and air loading = 120 scfm/ft2.

223B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping - Brewster, NY", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

The pilot plant in Ref. 207B was used along with a 6 in. i.d. and 12 in. i.d. pilot plants. In addition, a full-scale unit was evaluated; it was 57 in i.d. with 17 ft. 8 in. of 1 in. plastic saddles. All four systems were operated at various air-water ratios and with various sizes of packing (48 runs).

Data in table from 57 in. unit at an air-water ratio = 37 with water loading = 0.011 m3/m2.sec. and air loading = 0.40 m3/m2.sec.

225B "Trihalomethane Packed Column Air Stripping Pilot Test - Miami, FL", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Data collected at six air-water ratios (9 to 120) with data on table for air-water ratio = 39 with liquid loading = 0.012 m3/m2-sec. and air loading = 0.45 m3/m2-sec.

Unstrippable chloroform = 0.13 ug/L
Unstrippable bromodichloromethane = 0.12 ug/L

224B Cummins, M.D., "Field Evaluation of Packed Column Air Stripping-Bastrop, LA, February 1984", Internal Report, TSD, ODW, EPA, Cincinnati, OH.

Same pilot plant as for Ref. 207B.

Data collected at five air-water ratios (8 to 87) and at several pressure-drop gradients. Data in table for air-water ratio = 45 with liquid loading = 0.0096 m3/m2-sec. and air loading = 0.43 m3/m2-sec.

226B Blackburn, J.W., et. al., "Organic Chemical Fate Prediction in Activated Sludge Treatment Processes", EPA Report No., EPA/600/52-85/102, Water Engineering Research Laboratory, Cincinnati, OH, November 1985.

Data on table from pilot plant with following operating conditions:

Phenol:	SRT =	8.8 days
	HRT =	26 hours
	MLSS =	3650 mg/L
	Infl. BOD =	2390 mg/L (soluble)
	Eff. BOD =	44 mg/L (soluble)
Toluene:	SRT =	9.1 days
	HRT =	24 hours
	MLSS =	2370 mg/L
	Infl. BOD =	720 mg/L (soluble)
	Eff. BOD =	31 mg/L (soluble)
Aniline:	SRT =	10.0 days
	HRT =	24 hours
	MLSS =	2550 mg/L
	Infl. BOD =	660 mg/L (soluble)
	Eff. BOD =	8 mg/L (soluble)

Feed was a foul condensate from a kraft pulp and paper mill spiked with test compound and inorganic nutrients. Data also collected on air emissions and concentrations on sludge.

A considerable amount of data also collected on batch stripping at various air flow rates, on adsorption of several organics on lyophilized MLSS and on batch degradation rates.

227C Ying, W., R.R. Bonk, V.J. Lloyd, and S.A. Sojka, "Biological Treatment of a Landfill Leachate in Sequencing Batch Reactors", Environmental Progress, Vol. 5, No. 1, pp 41-50 (February 1986).

SBR's of various sizes (1L, 12L and 500L) were operated at HRT's of 2, 5 and 10 days at various MLSS concentrations. Feed consisted of pretreated leachate from Hyde Park Landfill, Niagara, NY.

Data on table from 500 L. SBR with 5 day HRT and MLSS = 10,000 mg/L. Influent COD = 5300 mg/L, effluent COD = 400 mg/L (92% removal) and effluent SS = 100 mg/L.

228A Bell, J.P., and M. Isezos, "Removal of Hazardous Organic Pollutants by Biomass Adsorption", Journal WPCF, Vol. 59, No. 4, pp 191-198 (April 1987).

Isotherms were conducted using distilled/deionized water and 99+% purity chemicals, MLSS were oven dried at 115 C then ground to pass 50-mesh screen. Contact time = 3 days at constant temperature (5, 20, 34 C). Filtered through 0.45 um filter.

Data on table for 30 C.

229A McIntyre, G.T., N.N. Hatch, S.R. Gelman, and T.J. Peschman, "Design and Performance of a Groundwater Treatment System for Toxic Organics Removal", Journal WPCF, Vol. 58, No. 1, pp 41-46 (Janauary 1986).

Air stripping tower:

dia. =	4 ft.
ht =	42 ft.
packing ht =	24 ft.
media =	3.5 in. dia. polyethylene
design flow =	150 gpm (12 gpm/ft2)
air-water ratio	200:1 (approx.)

Carbon beds (3 in series)

l x w x ht =	15.5 ft. x 4.5 ft. x 4.5 ft.
carbon =	8000 lb. each
hyrdraulic loading =	3 gpm/ft2
EBCT =	15 min./bed

All effluent concentrations were N.D.

229A McIntyre, G.T., N.N. Hatch, S.R. Gelman, and T.J. Peschman, "Design and Performance of a Groundwater Treatment System for Toxic Organics Removal", Journal WPCF, Vol. 58, No. 1, pp 41-46 (Janauary 1986).

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All effluent concentrations were N.D.

231A Wang, Y.T., M.T. Suidin, and B.E. Rittman, "Anaerobic Treatment of Phenol by an Expanded-bed Reactor", Journal WPCF, Vol. 58, No. 3, pp 227-233 (March 1986).

Used an upflow, completely mixed, expanded-bed anaerobic piolt plant for 588 days reactor:

I.D. -	10.2 cm
length -	134.6 cm
flow rate -	4.5 ml/min
recycle -	5.1 l/min
EBCT -	1 day
media -	2.4 kg of GAC
expansion -	(approx.) 25%
temp. -	35 C

232A Wang, Y.T., M.T. Suidan, and J.T. Pfeffer, "Anaerobic Activated Carbon Filter for the Degradation of Polycyclic N-Aromatic Compounds", Journal WPCF, Vol. 56, No. 12, pp 1247-1253 (December 1984).

Pilot plant sizes, flow rates, etc. same as those in Ref. 231A.