530SW900270

Cleaning Agents and Cosmetics Manufacturers

Industry Overview

Not all businesses in the cleaning agents and cosmetic manufacturing category use hazardous substances. If, however, you use solvents, ignitable liquids, strong acids or bases, heavy metals, toxic organic constituents, or pesticides, you might generate hazardous waste. If you generate hazardous waste, you might be subject to the Resource Conservation and Recovery Act (RCRA) requirements covering the generation, transportation, and management of hazardous waste.

Your business is included in the *cleaning agents and cosmetics manufacturing* category if you formulate or manufacture:

- Soaps, detergents or specialty cleaners
- Polishing or sanitizing compounds
- Surfactants, finishing agents, or sulfonated oils and other assistants
- Perfumes
- Cosmetics
- Toilet preparations or sundries.

Hazardous Wastes from Cleaning Agents and Cosmetics Manufacturing

Manufacturers of cleaning agents and cosmetics use a wide range of processes and products, and many types of waste are generated. Table 1 summarizes the major hazardous waste types generated by manufacturers of cleaning agents and cosmetics, and Table 2 provides information about specific hazardous wastes. Generally, hazardous wastes from cleaning agents and chemical manufacturing are solvent wastes, pesticide wastes, acid/alkaline wastes, and heavy metal wastes. Wastewaters and sludges from cleaning equipment used in the formulation of soaps and stabilizers containing chromium and lead are listed hazardous wastes.

If you generate more than 100 kilograms (220 pounds or about one-half of a 55-gallon drum) of hazardous waste per month, you must complete a Uniform Hazardous Waste Manifest when shipping your waste. The Manifest requires the DOT (Department of Transportation) description of the waste, including the shipping name, hazard class, and UN/NA ID number. This information is provided in Table 2 for some wastes generated by manufacturers of cleaning agents and cosmetics. Table 1 and Table 2 are not comprehensive lists. If you suspect that you generate a hazardous waste that is not on this list, contact your state hazardous waste management agency or EPA Regional office for assistance.

Waste Minimization

An effective waste minimization program can reduce the costs, liabilities, and regulatory burdens of hazardous waste management, while potentially enhancing efficiency, product quality, and community relations. Waste minimization techniques that can help you reduce the amount of hazardous waste that you generate include:

- Production planning and sequencing
- Process/equipment adjustment or modification
- Raw material substitution
- Loss prevention and housekeeping
- Waste segregation and separation
- Recycling.

Training and supervision of employees implementing waste minimization techniques is an important part of your successful program. Call the RCRA/Superfund Hotline toll-free at 800-424-9346 (or TDD 800-553-7672 for the hearing-impaired) for waste minimization information and publications.

Table 1
Typical Cleaning Agents and Cosmetics Manufacturing Operations: Materials Used and Hazardous Wastes that Might be Generated

Process/ Operation	Materials Used	General Types of Waste Generated
Cleaning Agent Manufacturing	Solvents, heavy metals, pesticides, organic chemicals, metals, strong acids and bases	Solvent wastes Toxic wastes Pesticide wastes Ignitable wastes Toxic heavy metal sludges and dusts Acid/alkaline wastes
Cosmetic Manufacturing	Solvents, organic chemicals, metals	Solvent wastes Toxic wastes Toxic heavy metal sludges

Table 2

Cleaning Agents and Cosmetics Manufacturing Waste Descriptions[1]

Waste Type	Designations/Trade Names	DOT Shipping Name	Hazard Class	UN/NA ID Number
STRONG ACID/ALKALINE WASTES				
Ammonium Hydroxide	Ammonium Hydroxide, NH_40H, Spirit of Hartshorn, Aqua Ammonia	Waste Ammonium Hydroxide (containing not less than 12% but not more than 44% ammonia)	Corrosive Material	NA2672
		(containing less than 12% ammonia)	ORM-A	NA2672
Hydrobromic Acid	Hydrobromic Acid, HBr	Waste Hydrobromic Acid	Corrosive Material	UN1788
Hydrochloric Acid	Hydrochloric Acid, HCl, Muriatic Acid	Waste Hydrochloric Acid	Corrosive Material	NA1789
Hydrofluoric Acid	Hydrofluoric Acid, HF, Fluorohydric Acid	Waste Hydrofluoric Acid	Corrosive Material	UN1790
Nitric Acid	Nitric Acid, HNO_2, Aquafortis	Waste Nitric Acid (over 40%)	Oxidizer	UN2031
		(40% or less)	Corrosive Material	NA1760
Phosphoric Acid	Phosphoric Acid, H_3P0_4, Orthophosphoric Acid	Waste Phosphoric Acid	Corrosive Material	UN1805
Potassium Hydroxide	Potassium Hydroxide, KOH, Potassium Hydrate, Caustic Potash, Potassa	Waste Potassium Hydroxide Solution	Corrosive Material	UN1814
		Dry Solid, Flake, Bead, or Granular	Corrosive Material	UN1813
Sodium Hydroxide	Sodium Hydroxide NaOH, Caustic Soda, Soda Lye, Sodium Hydrate	Waste Sodium Hydroxide Solution	Corrosive Material	UN1824
		Dry Solid, Flake, Bead, or Granular	Corrosive Material	UN1823
Sulfuric Acid	Sulfuric Acid, H_2SO_4, Oil of Vitriol	Waste Sulfuric Acid	Corrosive Material	UN1832
Chromic Acid	Chromic Acid	Waste Chromic Acid Solution	Corrosive Material	UN1755
SPENT SOLVENTS, AND IGNITABLE WASTES AND/OR TOXIC WASTES CONTAINING:				
Ignitable Alcohol	Alcohol	Waste Alcohol, NOS[2]	Flammable Liquid[3]	UN1987
			Combustible Liquid[4]	UN1987
Aromatic Hydrocarbons	Aromatic Hydrocarbons	Waste Flammable Liquid, NOS	Flammable Liquid	UN1993
		Waste Combustible Liquid, NOS	Combustible Liquid	NA1993
Methyl Alcohol	Methanol	Waste Methyl Alcohol	Flammable Liquid	UN1230
Ethyl Alcohol	Ethanol, Alcohol	Waste Ethyl Alcohol	Flammable Liquid	UN1170
Isopropyl Alcohol	Isopropanol	Waste Isopropanol	Flammable Liquid	UN1219
Toluene	Methyl Benzene, Toluol	Waste Toluene	Flammable Liquid	UN1294
Xylene	Dimethyl Benzene, Xylol	Waste Xylene	Flammable Liquid	UN1307
Solvent Mixtures		Waste Combustible Liquid, NOS	Combustible Liquid	NA1993
		Waste Flammable Liquid, NOS	Flammable Liquid	UN1993
White Spirits, Varsol	White Spirits, Mineral Spirits, Naphtha	Waste Naphtha, Solvent	Flammable Liquid	UN1256
1,1,1-Trichloroethane	Aerothene TT, Chlorten, Chloroethene, Methyl-Chloroform, Alpha T, Chlorotene	Waste 1,1,1-Trichloroethane	ORM-A	UN2831
Petroleum Distillates	Petroleum Distillates	Waste Petroleum Distillates	Flammable Liquid	UN1268
			Combustible Liquid	UN1268
Ethylene Dichloride*	Ethylene Dichloride, 1,2-Dichloroethane	Waste Ethylene Dichloride	Flammable Liquid	UN1184
Benzene*	Benzene	Waste Benzene (benzol)	Flammable Liquid	UN1114
Ethyl Benzene	Ethyl Benzene	Waste Ethyl Benzene	Flammable Liquid	UN1175
Chlorobenzene*	Chlorobenzene, Monochlorobenzene, Phenylchloride	Waste Chlorobenzene	Flammable Liquid	UN1134

Table 2 (continued)
Cleaning Agents and Cosmetics Manufacturing Waste Descriptions[1]

Waste Type	Designations/Trade Names	DOT Shipping Name	Hazard Class	UN/NA ID Number
2,4,5-T	2,4,5-Trichlorophenoxy Acetic Acid, Brush-Rap, Farmers Fence Rider, Weedone	Waste 2,4,5-Trichlorophenoxyacetic Acid	ORM-A	NA2765
		Waste 2,4,5-Trichlorophenoxyacetic Acid (amine, ester, or salt)	ORM-E	NA2765
		Waste Phenoxy Pesticide, Liquid, NOS	Flammable Liquid	UN2766
Silvex*	2,4,5-Fenoprop, Fruitone T, Kuron, Weed-B-Gone	Waste 2-(2,4,5-Trichlorophenoxy) propionic Acid	ORM-A	NA2765
		Waste 2-(2,4,5-Trichlorophenoxy) propionic Acid Ester	ORM-E	NA2765
		Waste Phenoxy Pesticide, Liquid, NOS	Flammable Liquid	UN2766
		Waste Phenoxy Pesticide, Liquid, NOS	Poison B	UN2765
ORGANOCHLORINE PESTICIDES				
Aldrin	HHDN, Aldrex 30, Altox, Drinox, Octalene, Seedrin Liquid	Waste Aldrin	Poison B	NA2761
		Waste Aldrin Mixture, Dry (with more than 65% Aldrin)	Poison B	NA2761
		Waste Aldrin Mixture, Dry (with 65% or less Aldrin)	ORM-A	NA2761
		Waste Organochlorine Pesticide, Liquid, NOS	Flammable Liquid	UN2762
Chlordane*	Chlorkil, Corodane, Octachlor	Waste Chlordane, Liquid	Flammable Liquid	NA2762
		Waste Chlordane, Liquid	Combustible Liquid	NA2762
DDT	DDT	Waste DDT	ORM-A	NA2761
Dichloropropene	1,3-Dichloropropene	Waste Dichloropropene	Flammable Liquid	UN2047
Dieldrin	Dieldrin, Dieldrex, Dieldrite	Waste Dieldrin	ORM-A	NA2761
Endrin*	Endrin, Endrex, Hexadrin	Waste Endrin, Liquid	Poison B	NA2761
		Waste Endrin Mixture	Poison B	NA2761
Endosulfan	Crisulfan, Malix	Waste Endosulfan	Poison B	NA2761
		Waste Endosulfan Mixture, Liquid	Poison B	NA2761
Heptachlor*	Gold Crest H-60, Drinox H-34, Heptamul, Heptox	Waste Heptachlor	ORM-E	NA2761
		Waste Organochlorine Pesticide, Liquid, NOS	Flammable Liquid	UN2762
Kepone	Chlordecone, GC 1189	Waste Kepone	ORM-E	NA2761
		Waste Organochlorine Pesticide, Liquid, NOS	Flammable Liquid	UN2762
Lindane*	Exgama, Forlin, Gallogama, Gamaphex, Gammex, Inexit, Isotox, Lindafor, Lindagam, Lindagrain, Lindagranox, Lindalo, Lindamul, Lindapourdre, Lindaterra, Novigam, Silvanol	Waste Lindane	ORM-A	NA2761
		Waste Organochlorine Pesticide, Liquid, NOS	Flammable Liquid	UN2762
Methoxychlor*	Flo Pro MeSeed Protectant, Marlate	Waste Methoxychlor	ORM-E	NA2761
		Waste Organochlorine Pesticide, Solid, NOS	Poison B	UN2701
		Waste Organochlorine Pesticide, Liquid, NOS	Poison B	UN2761
		Waste Organochlorine Pesticide, Liquid, NOS	Flammable Liquid	UN2762
Propylene Dichloride	1,2-Dichloropropane	Waste Propylene Dichloride	Flammable Liquid	UN1279
Toxaphene*	Attac 4-2, 4-4, 6, 6-3, 8, Camphochlor, Motox, Phenacide, Phenatox, Strobane T-90, Toxakil, Toxon 63	Waste Toxaphene	ORM-A	NA2761
		Waste Organochlorine Pesticide, Liquid, NOS	Flammable Liquid	UN2762
OTHER WASTES				
Ignitable Wastes, NOS		Waste Flammable Liquid, NOS	Flammable Liquid	UN1993
		Waste Flammable Solid, NOS	Flammable Solid	UN1325
		Waste Combustible Liquid, NOS	Combustible Liquid	NA1993
Hazardous Waste		Hazardous Waste, Liquid or Solid, NOS	ORM-E	UN9189

* Toxicity Characteristic constituent. Any waste that results in a TCLP extract containing a Toxicity Characteristic constituent equal to or above regulatory levels is hazardous.

1 These descriptions may change given variations in waste characteristics or conditions. Note that the DOT shipping name, hazard class, and UN/NA ID number do not directly correspond to RCRA hazardous waste categories.

2 NOS - Not otherwise specified.

3 A flammable liquid has a flash point below 100°F.

4 A combustible liquid has a flash point between 100°F and 200°F.

For further information call the RCRA/Superfund Hotline 1-800-424-9346