

POTENTIAL RCRA WASTE CODES FOR AMBER-LIST AND RED-LIST OECD WASTES

The following table should be used as a guide only. The OECD waste category descriptions are broad and may include both hazardous and non-hazardous wastes. Therefore, it is difficult to predetermine applicable RCRA waste codes. As presented, these are the RCRA waste codes that may be applicable. However, this depends on the physical and chemical characteristics of the waste as well as the process from which it was generated. In addition, wastes in any of the lists (green, amber, or red) may be covered by the final rule if the wastes meet the Federal definition of hazardous waste in 40 CFR 261.3 (*e.g.*, exhibit any characteristic in 40 CFR 261.21 - 261.24 and/or meet a listing description in 40 CFR 261.31 - 261.33) even if the RCRA waste code has not been identified in the table. This table also does not purport to provide a complete description of the wastes or applicable exemptions. Persons interested in determining whether a particular waste is excluded from the definitions of solid or hazardous wastes will need to consult the appropriate regulations.

Waste Description	OECD Waste Code	Possible RCRA Waste Codes	Comments
OECD AMBER LIST			
Dross, scalings and other wastes from the manufacture of iron and steel	AA010	D006-D008, K061, K062	Under 40 CFR 261.4(b)(7), slag and dust from blast iron, basic oxygen steel, and open hearth steel furnaces are not considered hazardous wastes.
Zinc ashes and residues	AA020	D004-D011 ¹ , K066	
Lead ashes and residues	AA030	D004-D011 ¹ , K002, K003, K005, K069, K086, K046, K065, K100	
Copper ashes and residues	AA040	D004-D011 ¹ , K064	
Aluminum ashes and residues	AA050	D004-D011 ¹ , K088	
Vanadium ashes and residues	AA060	D004-D011 ¹	
Ashes and residues containing metals or metal compounds not elsewhere specified or included	AA070	D003-D043 ¹	
Thallium waste and residues	AA080	U214-U217, P113, P114, P115	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Arsenic waste and residues	AA090	D004, P010, P011, P012, U136	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Mercury waste and residues	AA100	D009, K071, K106, P065, P092	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Residues from alumina production not elsewhere specified or included	AA110	K088	Under 40 CFR 261.4(b)(7)(iii), red and brown muds are not considered hazardous wastes.
Galvanic sludges	AA120	D006-D008	
Liquors from the pickling of metals	AA130	D002, D006-D008, K062	
Leaching residues from zinc processing, dusts and sludges such as jarosite, hematite, goethite, etc.	AA140	D002, D008, D011	
Precious metal bearing residues in solid form which contain traces of inorganic cyanides	AA150	F008, D004-D011	
Precious metal ash, sludge, dust and other residues such as: - ash from incineration of printed circuit boards - photographic film ash	AA160 AA161 AA162	D004-D011 ¹	Shredded electronic scrap such as that from circuit boards that have been incinerated could contain PCBs as well as dibenzofurans in the ash due to insufficient incinerator temperature. Thus, import/export restrictions under TSCA (40 CFR part 707) may be applicable.

Waste Description	OECD Waste Code	Possible RCRA Waste Codes	Comments
Lead-acid batteries, whole or crushed	AA170	D002, D008	Whole lead-acid batteries are not subject to Federal manifest requirements when recycled (40 CFR 266.80(a)).
Used batteries or accumulators, whole or crushed, other than lead-acid batteries, and waste and scrap arising from the production of batteries and accumulators, not elsewhere specified or included	AA180	D002, D003, D006, D009	Batteries are not regulated as hazardous waste (<i>e.g.</i> , no manifest required) when returned to a battery manufacturer for regeneration (40 CFR 261.6(a)(3)(ii)). Batteries shipped for reclamation of metals are regulated and require manifesting.
Slag, ash and residues, not elsewhere specified or included	AB010	D003-D043 ¹	
Residues arising from the combustion of municipal/household wastes	AB020	D004-D043	The U.S. Supreme Court has ruled that ash from the incineration of municipal solid waste that exhibits a characteristic of hazardous waste must be managed as hazardous waste. Such characteristically hazardous MSW ash will be subject to Amber controls when exported.
Wastes from non-cyanide based systems which arise from surface treatment of metals	AB030	F006, F019, D002, D006-D008, K062	
Glass waste from cathode-ray tubes and other activated glasses	AB040	D008, D009	
Calcium fluoride sludge	AB050	None	
Other inorganic fluorine compounds in the form of liquids or sludges	AB060	D002, D004-D011, P056	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Sands used in foundry operations	AB070	D006-D008, D037	
Waste catalysts not on the green list	AB080	D003, D004-D011 ¹ , K021, K028	
Waste hydrates of aluminum	AB090	D004-D011	
Waste alumina	AB100	D004-D011	
Hydrogen peroxide solutions	AB110	D003	
Basic solutions	AB120	D002, D004-D043	
Inorganic halide compounds, not elsewhere specified or included	AB140	D002-D011, P033, U134, U216, U246	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Used blasting grit	AB140	D003, D006-D008	
Gypsum arising from chemical industry processes	AB150	D002-D011	
Unrefined calcium sulphite and calcium sulphate from flue gas desulphurisation (FGD)	AB160	Undetermined	
Waste from the production/processing of petroleum coke and bitumen, excluding anode butts	AC010	D004, D006-D008, D035, F003, F005	
Asphalt cement wastes	AC020	D001, F001-F005	

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Waste oils unfit for their originally intended use	AC030	D001, D004-D043	Not subject to Federal manifest requirements when recycled, <u>except</u> if mixed with hazardous waste. See 40 CFR Part 279.
Leaded petrol (gasoline) sludges	AC040	D008', K052	
Thermal (heat transfer) fluids	AC050	D001, D004-D043	Subject to the import/export restrictions under TSCA (40 CFR part 707) if PCB concentration is 50 ppm or greater [40 CFR part 761.30(d)].
Hydraulic fluids	AC060	D001, D004-D043	Subject to the import/export restrictions under TSCA (40 CFR part 707) if PCB concentration is 50 ppm or greater [40 CFR part 761.30(e)].
Brake fluids	AC070	D001, D004-D043	
Antifreeze fluids	AC080	D001, D008, D018, U154	
Wastes from production, formulation and use of resins, latex, plasticizers, glues and adhesives	AC090	D001', F001-F005	PCBs were used extensively as plasticizers. Therefore, if the wastes are from materials produced 15 years or more ago, they could contain PCBs at concentrations of 50 ppm or greater. Thus, import/export restrictions under TSCA (40 CFR part 707) may be applicable. Other OECD countries may require use of red tier procedures.
Nitrocellulose	AC100	D001, D003	
Phenols, phenol compounds including chlorophenol in the form of liquids or sludges	AC110	P020, P034, P047, P048, P092, P093, U039, U052, U081, U082, U089, U101, U132, U170 U188, U242, F021, F020, F023, F027, D037, D041, D042	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Polychlorinated naphthalenes	AC120	U047	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Ethers	AC130	D001, P016, U117, U025, U027	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Triethylamine catalysts for setting foundry sands	AC140	D003	

Waste Description	OECD Waste Code	Possible RCRA Waste Codes	Comments
Chlorofluorocarbons	AC150	D001, F002, U121	<p>Under 40 CFR 261.4(b)(12), used chlorofluorocarbon refrigerants that are reclaimed for further use are excluded.</p> <p>Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).</p> <p>Chlorofluorocarbons are routinely used as solvents for PCBs, especially in reclassifying electrical equipment. Thus, depending on PCB level, import/export restrictions under TSCA (40 CFR part 707) may be applicable.</p> <p>Substances classified as ozone-depleting substances (such as chlorofluorocarbons), are subject to import restrictions under the provisions of the Montreal Protocol and under regulations promulgated pursuant to the Clean Air Act (40 CFR part 82). EPA is currently engaged in rulemaking to implement additional import/export restrictions that are contained in the protocol.</p>
Halons	AC160	None	<p>Halons are routinely used as solvents for PCBs, especially in reclassifying electrical equipment. Thus, depending on PCB level, import/export restrictions under TSCA (40 CFR part 707) may be applicable.</p> <p>Substances classified as ozone-depleting substances (such as halons), are subject to import restrictions under the provisions of the Montreal Protocol and under regulations promulgated pursuant to the Clean Air Act (40 CFR part 82). EPA is currently engaged in rulemaking to implement additional import/export restrictions that are contained in the protocol.</p>
Treated cork and wood wastes	AC170	D004, D006, D037, D023-D026	
Leather dust, ash, sludges and flours	AC180	D007	The exclusion under 40 CFR 261.4(b)(6) may apply.
Fluff - light fraction from automobile shredding	AC190	D004-D043	Subject to the import/export restrictions under TSCA (40 CFR part 707) if PCB concentration is 50 ppm or greater.
Organic phosphorous compounds	AC200	P039, P040, P041, P043, P044, P071, P085, P089, P094, P097, P109, P111, U058, U087, U235	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Non-halogenated solvents	AC210	D001, D018, D023-D026, D035, D036, D038, F003, F004, F005, P022, U002, U019, U031, U052, U057, U112, U117, U140, U154, U159, U161, U169, U171, U196, U220, U239	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).

Waste Description	OECD Waste Code	Possible RCRA Waste Codes	Comments
Halogenated solvents	AC220	D001, D019, D021, D022, D028, D039, D040, F001, F002, U037, U070, U075, U080, U121, U210, U211, U227, U228	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Halogenated or unhalogenated non-aqueous distillation residues arising from organic solvent recovery operations	AC230	D001, D018, D019, D021-D026, D028, D035, D036, D038, D039, D040, F001-F005	
Surface active agents (surfactants)	AC240	Undetermined	
Liquid pig manure; feces	AC250	None	
Sewage sludge	AC260	D004-D043 ¹	However, sewage sludges can contain PCBs because of contamination from industrial or other sources. Therefore, sludge is subject to the import/export restrictions under TSCA (40 CFR part 707) if PCB concentration is 50 ppm or greater.
Wastes from the production and preparation of pharmaceutical products	AD010	D001, D022, K084, K101, K102	
Wastes from the production, formulation and use of biocides and phytopharmaceuticals	AD020	D001, D002	
Wastes from the manufacture, formulation and use of wood preserving chemicals	AD030	K001, F032, F034, F035, F021, F020, F023, F027, F028, D004, D041, D042, D037	Under 40 CFR 261.4(a)(9), spent wood preserving solutions and wastewaters that have been reclaimed and used for original intended purpose are not solid wastes and not hazardous waste.
Wastes that contain, consist of or are contaminated with any of the following: - inorganic cyanides, excepting precious metal bearing residues in solid form containing traces of inorganic cyanides - organic cyanides	AD040 AD050	D001, D003, F007-F012, P021, P029, P030, P031, P033, P101, P063, P064, P074, P098, P099, P104, P106, P121, U246, U223	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).
Waste oils/water, hydrocarbons/water mixtures, emulsions	AD060	D004-D043 ¹	
Wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish	AD070	D001, D004-D043 ¹ , K002-K008, K086, F001-F005	Some of these materials (specifically yellow and blue pigments) have been known to contain incidentally manufactured PCBs, thus, import/export restrictions under TSCA (40 CFR part 707) may be applicable.
Wastes of an explosive nature, when not subject to specific other legislation	AD080	D003 ¹	
Wastes from production, formulation and use of reprographic and photographic chemicals and materials not elsewhere specified or included	AD090	D001, D002, D003, D011	

Waste Description	OECD Waste Code	Possible RCRA Waste Codes	Comments
Wastes from non-cyanide based systems which arise from surface treatment of plastics	AD100	Undetermined	
Acidic solutions	AD110	D002, D004-D043, K062, K107, K111, K124, K131, U123, U134	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)). Under 40 CFR 261.4(a)(7), spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively (40 CFR 261.1(c)), is excluded from the definition of solid waste.
Ion exchange resins	AD120	D004-D011, K062, K086, K100	
Single use cameras with batteries	AD130	D006-D009, D011	
Wastes from industrial pollution control devices for cleaning of industrial off-gases, not elsewhere specified or included	AD140	D002-D011, D018, D019, D021, D022, D027-D029, D035, D039, D040, D043, F025, K061, K069, K124, K126, K131	
Naturally occurring organic material used as a filter medium (such as bio-filters)	AD150	None	
Municipal/household wastes	AD160	None	Under 40 CFR 261.4(b)(1), household waste is excluded from the definition of hazardous waste. EPA is seeking legislative authority to control household waste in order to implement the Basel Convention. The OECD Decision will cover household waste, whether or not hazardous, once member countries have domestic authority to control it. OECD RED LIST
Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB) and/or polychlorinated terphenyl (PCT) and/or polybrominated biphenyl (PBB), including any other polybrominated analogues of these compounds, at a concentration level of 50 mg/kg or more	RA010		If the waste is contaminated with 50 ppm or greater of PCBs, the waste is subject to the Toxic Substances Control Act.
Waste tarry residues (excluding asphalt cements) arising from refining, distillation and any pyrolytic treatment of organic materials	RA020	D001, D003, D004, D007, D008, D018, D021, D023-D027, D032, D036, D037, D041, D042, F001-F005, F024, K009, K013-K020, K022-K025, K027, K030, K036, K042, K060, K083, K085, K087, K093-K096, K107, K115, K136	
Asbestos (dusts and fibres)	RB010	None	

Waste Description	OECD Waste Code	Possible RCRA Waste Codes	Comments
Ceramic based fibres of physico-chemical characteristics similar to those of asbestos	RB020	None	
Wastes that contain, consist of or are contaminated with any of the following: - any congener of poly-chlorinated dibenzo-furan - any congener of poly-chlorinated dibenzo-dioxin	RC010 RC020	F020-F023, F026-F028	
Leaded anti-knock compound sludges	RC030	D008 ¹	
Peroxides other than hydrogen peroxide	RC040	D003, U096, U160	Unused commercial chemical products, when reclaimed, are not solid wastes and therefore not hazardous wastes (40 CFR 261.2(c)(3)).

¹ Under 40 CFR 261.2(c)(3), characteristic byproducts and sludges are not considered solid wastes or hazardous wastes, when reclaimed.