

## Chemicals for Consideration in Green Procurement

Chemical	Concern	List	Products/Ingredients
1,2-Dichloroethane	RA	NTP	Adhesives, building supplies
1,2,3, Trichloropropane	RA	NTP	Chemical solvent
1,2,4-Trichlorobenzene	PBT	EPA	Degreasers, lubricants, solvent
1,2,4,5-Tetrachlorobenzene	PBT	EPA	Intermediate to make pesticides
1,3 Dichloropropene	RA	NTP	Pesticide
1,4 Dioxane	RA	NTP	Varnish stripper, by-product of surfactants
1,4-Dichlorobenzene (para-dichlorobenzene)	RA	NTP	Urinal blocks, deodorizers
2,2 bis(Bromoethyl) 1,3 propanediol,	RA	NTP	Flame retardant
2,3 Dibromo-1-propanol	RA	NTP	Poly-urethane foam
2,3,7,8-Tetrachlorodibenzo-p-dioxin	KHC	NTP	Chlorine-bleached paper products
2,4,5-Trichlorophenol	PBT	EPA	Fungicide, herbicide
3-Chloro-2-methylpropene	RA	NTP	Pesticide
4-Bromophenyl phenyl ether	PBT	EPA	Former flame retardant
Acenaphthene	PBT	EPA	PAH, used to make dyes, plastics, pesticides, wood preservatives (creosote, coal tar, roofing tar), auto exhaust
Acenaphthylene	PBT	EPA	PAH, used to make dyes, plastics, pesticides, wood preservatives (creosote, coal tar, roofing tar), auto exhaust
Acetaldehyde	KHC	NTP	Adhesives
Amitrole	RA	NTP	Pesticide
Arsenic compounds, Inorganic	KHC	NTP	Wood preservative, treated wood
Asbestos	KHC	NTP	Roofing shingles, siding
Benzene	KHC	NTP	Contaminant of solvents
Benzo (g,h,i) perylene	PBT	EPA	PAH, used to make dyes, plastics, pesticides, wood preservatives (creosote, coal tar, roofing tar), auto exhaust
Beryllium and beryllium compounds	KHC	NTP	Cell phones
Bis (Chloromethyl) Ether, Technical Grade Chloromethyl Methyl Ether	KHC	NTP	Cleaning products
Bisphenol A	PRT	EPA COC	Bottles, etc.
Cadmium and cadmium compounds	KHC, PBT	EPA, NTP	Pigments, batteries, plastics, products containing flyash, stabilizer for PVC
Carbon tetrachloride	RA	NTP	Cleaning solvent, adhesive, adhesive remover
Ceramic fibers	RA	NTP	Fiber board insulation
Chloroprene	RA	NTP	Glues, adhesives
Chromium, hexavalent	KHC	NTP	Contaminant, possibly in leather
Coal tar and pitches	KHC	NTP	Road patching and paving material, roofing material
Di(2-ethylhexyl) phthalate (DEHP)	RA	NTP	PVC building supplies, office supplies
Dibenzofuran	PBT	EPA	Coal tar-based products; products containing flyash; coke dust
Dichloromethane (Methylene chloride)	RA	NTP	Graffiti removers, paint strippers, lubricants

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Diesel exhaust particulates	RA	NTP	Buses, trucks, power generators
Diethyl Sulfate	RA	NTP	Carbonless paper
Dioxins and furans (polychlorinated)	PBT	EPA	Generated from the manufacture and incineration of chlorinated paper products, solvents, pesticides, plastics
Endosulfan	PBT	EPA	Insecticide, wood preservative (not made in the US)
Ethylene dichloride (1,2 Dichloroethane)	RA	NTP	Adhesives, caulking
Ethylene oxide	KHC	NTP	Hospital-grade sterilant, fungicide
Fluorene	PBT	EPA	PAH, used to make dyes, plastics, pesticides, wood preservatives (creosote, coal tar, roofing tar), auto exhaust
Formaldehyde gas	RA	NTP	Carpet, tile, glues, adhesives caulking, particle board, furniture
Furan	RA	NTP	Wood preservative, asphalt and patching material, roofing patch, resins
Glass Wool	RA	NTP	Thermal, electrical and acoustical insulation
Heptachlor; heptachlor epoxide	PBT	EPA	Banned pesticide
Hexachlorobenzene	PBT, RA	EPA, NTP	Banned pesticide; contaminant of products containing chlorinated organics
Hexachlorobutadiene	PBT	EPA	Contaminant in the manufacture of rubber
Hexachlorocyclohexane, gamma (Lindane)	PBT	EPA	Pesticide used to control lice and scabies in humans and animals
Hexachloroethane	PBT, RA	EPA, NTP	Artificial smoke, munitions, lubricants, byproduct of incineration of chlorinated products
Hexamethylphosphoramide	RA	NTP	Rodenticide
Hexavalent chromium		EU, RoHS	Contaminant, possibly in leather
Lead and lead compounds	PBT, RA	NTP	Batteries, light bulbs, appliances, computers, products containing flyash, cell phones, other electronics, PVC (pigment/stabilizer)
Lindane and other hexachlorocyclohexane Isomers	RA	NTP	Pesticide used to control lice and scabies in humans and animals
Mercury	PBT	EPA and EU RoHS	Light bulbs, appliances, computers, products containing flyash, thermometers, thermostats
Methoxychlor	PBT	EPA	Insecticide
Methylene Chloride	RA	NTP	Chemical solvent, paint stripper, printing inks, automotive degreasing
Mineral oils (untreated and mildly treated)	KHC	NTP	Lubricants
Naphthalene	PBT, RA	EPA, NTP	Mothballs, dyes, leather goods, insecticides; wood preservatives, coal tar-based products
Nickel (metallic)	RA	NTP	Batteries
Nickel compounds	KHC	NTP	Electroplated items
Nitromethane	RA	NTP	Chemical solvent
Nitropropane	RA	NTP	Solvent for inks, paints and varnishes
Nitrosodimethylamine	RA	NTP	Control of nematodes
PBDEs (Octa, penta and deca)	PC	EU, RoHS	Furniture, carpeting, computers, other electrical equipment
Pendimethalin	PBT	EPA	Herbicide (used on rights-of-way)

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Pentachlorobenzene	PBT	EPA	Used to make the fungicide pentachloronitrobenzene (PCNB)
Pentachloronitrobenzene	PBT	EPA	Fungicide (used as lawn chemical and to prevent slime in industrial water tanks)
Pentachlorophenol	PBT	EPA	Wood preservative used on powerline poles, railroad tracks, fences
PFOS and PFOA	LC	EPA COC	Fabrics, paper, cookware, floor polishes, etc.
Phenanthrene	PBT	EPA	PAH, used to make dyes, plastics, pesticides, wood preservatives (creosote, coal tar, roofing tar), auto exhaust
Polybrominated biphenyls (PBBs)	RA, PC	NTP	Brominated flame retardant banned in 1970s. May still be in imported products.
Polychlorinated biphenyls (PCBs)	RA, PBT	NTP, EPA	Banned in US but may still be contaminant of some manufacturing processes.
Polycyclic aromatic hydrocarbons (PAHs)	PBT, RA	EPA, NTP	PAH, used to make dyes, plastics, pesticides, wood preservatives (creosote, coal tar, roofing tar), auto exhaust
Propylene oxide	RA	NTP	Glues, adhesives, caulking
Pyrene	PBT	EPA	PAH, used to make dyes, plastics, pesticides, wood preservatives (creosote, coal tar, roofing tar), auto exhaust
Selenium sulfide	RA	NTP	Fungicide
Silica, Crystalline (respirable size)	KHC	NTP	Paint, primers, cleaning products
Tetrachloroethylene (Perchloroethylene)	RA	NTP	Solvents (including dry cleaning), degreasers, graffiti removers, paint strippers, lubricants
Tetrafluoroethylene	RA	NTP	Used in the production of Teflon
Toluene Diisocyanate	RA	NTP	Floor and wood finishes
Trichloroethylene	RA	NTP	Solvents, degreasers, graffiti removers, paint strippers, lubricants, carpet and upholstery cleaners
Trifluralin	PBT	EPA	Herbicide (used on rights-of-way)
Tris (2,3 Dibromopropyl) phosphate	RA	NTP	Flame retardant found in upholstery
Urethane	RA	NTP	Sealants
Vinyl chloride	KHC	NTP	Siding, piping, roofing, carpet, wall paper, shower curtains
Vinyl fluoride	RA	NTP	Wall, pipe and electrical covering

### Legend:

KHC = Known Human Carcinogen, RA = Reasonably Anticipated to be a Human Carcinogen, PBT = Persistent Bio-accumulative Toxin, LC = Likely Carcinogen, PC = Possible Carcinogen (EU)

EPA = EPA Waste Minimization Priority, NTP = National Toxicology Program 11th Report, EU = European Union, RoHS = Restriction of Hazardous Substances Directive (EU), EPA COC = Chemical of Concern