

Chemical Hygiene Plan – Appendix D: Inventory of Carcinogens and Other Specific Hazards

In its Laboratory Standard, OR-OSHA requires the establishment of additional protections for persons working with “Particularly Hazardous Substances”. OSHA defines these products as “select” carcinogens, reproductive toxins, and acutely toxic materials.

As part of the additional protections required, each location must have an inventory of carcinogens which PCC has expanded to include chemicals that have been classified by the GHS / SDS system as having the following hazards: (See Appendix C for further explanation of the following categories)

Carcinogen as a:

- Category 1 (includes 1A and 1B): Known or presumed human carcinogen
- Category 2: Suspected human carcinogens

Reproductive Hazard as a:

- Category 1: Known or presumed human reproductive toxicants
- Category 2: suspected human reproductive toxicant and effects on or via lactation.

Germ cell mutagenicity as a:

- Category 1A: Substances known to induce heritable mutations in germ cells of humans
- Category 1B: Substances which should be regarded as if they induce heritable mutations in the germ cells of humans

Acute toxicity

- Category 1
- Category 2

As some products used at PCC are classified as having more than one of these hazards, this inventory has been organized as a table to better present this information.

In the table headers below, C represents Carcinogen, RH represents Reproductive Hazard, GCM represents Germ Cell Mutagenicity, and AT represents Acute Toxicity.

The number and letter combination in each column corresponds to the classification category for that hazard.

Cascade - Chemistry, Biology, and MLT - JH Room 222

| Product Name | CAS # | C | RH | GCM | AT |
|--|--------------|----------|-----------|------------|-----------|
| Congo Red | 573-58-0 | 1B | | | |
| Crystal Violet | 548-62-9 | 1B | | | |
| Formaldehyde solution 37% | 50-00-0 | 2 | | | |
| Phenol Red Solution 0.025% | | 1A | | | |
| Phenolphthalein, powder | 77-09-8 | 2 | | | |
| Potassium Nitrate | 7758-09-0 | 2 | | | |
| Sulfuric Acid, GR | 7664-93-9 | 2 | | | |
| Toluene reference substance for gas chromatography | 108-88-3 | | 2 | | |
| Tris Borate EDTA buffer, 20x | | | 1B | | |

Rock Creek - Chemistry - Building 7 Room 217

| Product Name | CAS # | C | RH | GCM | AT |
|-------------------------------------|--------------|----------|-----------|------------|-----------|
| 4-Methyl-2-pentanone | 108-10-1 | 2 | | | |
| Chloroform, stabilized with ethanol | | 2 | 2 | | |
| Cobalt chloride hexahydrate | 7791-13-1 | 2 | 2 | | |
| Hexanes, reagent, ACS | | | 2 | | |
| Hydrogen peroxide | 7722-84-1 | | | 1B | |
| Lead(II) iodide | 10101-63-0 | 1B | 1A | | |
| Nickel sulfate hexahydrate | 10101-97-0 | 1A | 1B | | |
| Nickel(II) chloride hexahydrate | 7791-20-0 | 1A | 1B | | |
| Petroleum ether | 8032-32-4 | 1B | | 1B | |
| Quartz | 14808-60-7 | 1A | | | |
| Sodium nitrate | 7632-00-0 | | | | 1 |
| Sulfuric acid, reagent, ACS | 7664-93-9 | | | | 2 |
| Toluene, reagent, ACS | 108-88-3 | | 2 | | |

Rock Creek - Biology - Building 7 Room 122

| Product Name | CAS # | C | RH | GCM | AT |
|-------------------------------------|--------------|----------|-----------|------------|-----------|
| 1-Naphthylamine | 134-32-7 | 1A | | | |
| 3-Indoleacetic acid (b-)(free acid) | 87-51-4 | 2 | | | |
| Acrylamide solution 40% | 79-06-1 | 1B | 2 | 1B | |
| Antibiotic Antimycotic | | | 1A | | |
| BCIP, 4-toluidine salt, solution | | | 1A | | |
| Carbon Steel Alloy Steel | | 1B | 1A | | |
| Chloramphenicol | 56-74-7 | 1B | | | |
| Chloroform/isoamyl alcohol 24:1 | 67-66-3 | 1B | 2 | | |
| Concanavalin A | 11028-71-0 | | 2 | | |
| Congo Red | 573-58-0 | 1B | 2 | | |
| Crystal Violet | 548-62-9 | 1B | | | |
| Evans Blue | 314-13-6 | 1B | | | |
| Formalin, 37% Formaldehyde | 50-00-0 | 1A | | | |
| Hydroquinone | 123-31-9 | 2 | | | |
| Isopropyl alcohol, reagent, ACS | 67-63-0 | | 2 | | |
| Kanamycin sulfate, powder | | | 1A | | |
| Malachite Green oxalate | 2437-29-8 | | 2 | | |
| NBT, Solution | | | 1A | | |
| N-Phenylthiourea | 103-85-5 | | | | 1 |
| Petroleum Ether | 8032-32-4 | 1B | | 1B | |

Southeast - Chemistry & Biology - SCOM Room 317

| Product Name | CAS # | C | RH | GCM | AT |
|---------------------------------|--------------|----------|-----------|------------|-----------|
| Catechol | 120-80-6 | 2 | | | |
| Congo Red Indicator | 573-58-0 | | 2 | | |
| Crystal Violet | 548-62-9 | 2 | | | |
| Hexanes | 110-54-3 | | 2 | | |
| Malachite Green Hydrochloride | 569-64-2 | | 2 | | |
| Methyl orange, sodium salt | 547-58-0 | | | 1B | |
| Petroleum ether | 8032-32-4 | 1B | | 1B | |
| Phenolphthalein | 77-09-8 | 1B | 2 | | |
| Phenylthiourea | 103-85-5 | | | | 1 |
| Phosphoric Acid, 15M | | | | | 1 |
| Sodium tetraborate, decahydrate | 1303-96-4 | | 1B | | |
| Sulfuric acid, 1M and 18M | 7664-93-9 | 1A | | | |
| Tris Borate EDTA buffer, 20x | | | 1B | | |

Sylvania - Engineering - AM Room 103

| Product Name | CAS # | C | RH | GCM | AT |
|--|--------------|----------|-----------|------------|-----------|
| Borax | 1303-96-4 | | 1B | | |
| Buehler Phenocure phenolic powder and premolds | | 2 | | | |
| Isopropyl alcohol, reagent, ACS | 67-63-0 | | 2 | | |
| Klean Strip Lacquer Thinner | | | 2 | | |
| Marking Chalk Yellow | | 2 | | | |
| Pro LSPR 6pk Mark White | | | | 1B | |

Sylvania - Biology - ST Room 207

| Product Name | CAS # | C | RH | GCM | AT |
|--|--------------|----------|-----------|------------|-----------|
| 14 oz. Camie 300 GNRL PRPS Adhesive LT 12PK | | | 2 | | |
| 3M Super 77 Multipurpose Adhesive (aerosol) | | | 2 | | |
| Ammonium Molybdate Tetrahydrate | | | 2 | | |
| Boric Acid | | | 1B | | |
| Catechol | 120-80-9 | 2 | | | |
| Congo Red 1% | | 1B | 2 | | |
| Crystal Violet | | 1B | | | |
| Formaldehyde solution 37% for synthesis | | 1B | | | |
| Fuchsin-Carbol, Ziehl-Neelsen Formulation | | 1B | 1B | 1B | |
| Isopropyl Alcohol, Reagent, ACS | 67-63-0 | | 2 | | |
| Kleermount in Xylene | | 2 | | | |
| Krylon Workable Fixatif Spray Coating | | | 2 | | |
| Malachite green oxalate for microscopy Certistain | | | 2 | | |
| Methyl Alcohol, anhydrous | | | 2 | | |
| Methyl green zinc chloride double salt for microscopy Certistain | | 2 | | | |
| Oatey PVC Regular Clear - Lo-VOC Formula | | 2 | | | |
| Oatey VOC Rain-R-Shine Blue Cement | | 2 | | | |
| Petroleum Ether (35-60C) | 8032-32-4 | 1B | | 1B | |
| Phenolphthalein, powder | 77-09-8 | 2 | | | |
| Phenylthiourea | 103-85-5 | | | | 1 |
| Purple Primer/Cleaner | | 2 | | | |
| Sodium Borate, Decahydrate, GR | 1303-96-4 | | 2 | | |
| Sodium nitrite | 7632-00-0 | 1B | | | |
| Sodium tetraborate decahydrate | 1303-96-4 | | 1B | | |
| Tris Borate EDTA Buffer, 20X | | | 1B | | |

Sylvania - Chemistry - ST Room 312

| Product Name | CAS # | C | RH | GCM | AT |
|--|------------|----|----|-----|----|
| Tetrachloroethylene EMPLURA | 127-18-4 | 2 | | | |
| Xylenes | | 2 | | | |
| (+/-)-3-Chloro-1,2-propanediol | 96-24-2 | 2 | 1B | | 2 |
| 1,2-Dimethoxyethane | 110-71-4 | | 1B | | |
| 1,3-Dinitrobenzene | 99-65-0 | | | | 1 |
| 1-Acetylferrocene | 1271-55-2 | | | | 2 |
| 1-Bromopropane | 106-94-5 | | | 1B | |
| 1-Chloro-2,4-dinitrobenzene | 97-00-7 | | | | 2 |
| 2,4,6-Trichlorophenol | 88-06-2 | 2 | | | |
| 2-Bromopropane | 75-26-3 | | 1B | | |
| 2-Nitropropane | 79-46-9 | 1B | | | |
| 3-Nitroaniline | 99-09-2 | | 2 | | |
| 4-Chloroaniline | 106-47-8 | 2 | | | |
| 4-Methyl-3-penten-2-one | 141-79-7 | | 2 | | |
| 4-Nitroaniline | 100-01-6 | | 2 | | |
| 4-Nitrotoluene | 99-99-0 | | | | 2 |
| Acetaldehyde | 75-07-0 | 2 | | | |
| Acetamide | 60-35-5 | 2 | 2 | | |
| Additional VOC's by Method 8260B | | 2 | | | |
| Ammonium Meta-Vanadate | 7803-55-6 | | 2 | | 1 |
| Ammonium molybdate tetrahydrate | | | 2 | | |
| Aniline | 62-53-3 | 2 | | | 2 |
| Basic Fuchsin | | 2 | | | |
| Benzophenone | | 2 | | | |
| Bisphenol A glycerolate dimethacrylate | | 2 | | | |
| Boric Acid, powder technical | 10043-35-3 | | 2 | | |
| Bromine | 7726-95-6 | | | | 2 |
| Buffer Solution, pH 10.00 | | | 1B | | |

| Product Name | CAS # | C | RH | GCM | AT |
|---|------------|----|----|-----|----|
| Chloroacetic acid | 79-11-8 | | | | 2 |
| Chloroform | 67-66-3 | 1B | | | |
| Chloroform-d | 865-49-6 | 2 | | | |
| Cobalt chloride | 7791-13-1 | 1B | 1B | | |
| Cobalt nitrate | 10028-22-9 | 1B | 1B | | |
| Cobalt(II) sulfate heptahydrate for analysis | 10026-24-1 | 1B | 1B | | |
| Collodion, U.S.P. | | 1A | | | |
| Congo Red, biological stain, pH indicator | 573-58-0 | 1B | 2 | | |
| Crystal Violet | 548-62-9 | 2 | | | |
| Cyclohexylamine | 108-91-8 | | 2 | | |
| Diatomaceous earth | 68855-54-9 | 1A | | | |
| Dichloromethane for analysis | 75-09-2 | 2 | | | |
| Dicyclopentadiene, stabilized | 77-73-6 | | | | 2 |
| Ethyl bromide | 74-96-4 | 2 | | | |
| Ethyl ether | 60-29-7 | | 2 | | |
| Ethylbenzene | 100-41-4 | 2 | 1B | | |
| Ferrocene | 102-54-5 | | 2 | | |
| Furfural | 98-01-1 | 2 | | | 2 |
| Hexanes 98% Practical | 110-54-3 | | 2 | | |
| Hydrazine dihydrochloride | 5341-61-7 | 1B | | | |
| Hydrazine Hydrate (100% Solution) | 302-01-2 | 1B | | | |
| Hydroquinone | 123-31-9 | 2 | | | |
| Klean Strip Kerosene | | | 2 | 1B | |
| Lead acetate, trihydrate, crystal, reagent, ACS | 6080-56-4 | 1B | 1A | | |
| Lead Shot | 7439-92-1 | 1A | 1A | | |
| Lead(II) chloride anhydrous for synthesis | 7758-95-4 | | 1A | | |
| Lead(II) nitrate for analysis | 10099-74-8 | | 1A | | |
| Malachite green oxalate salt | 2437-29-8 | | 2 | | |
| Mercuric acetate | 1600-27-7 | | | | 1 |
| Mercuric chloride | 7487-94-7 | | 2 | | 2 |

| Product Name | CAS # | C | RH | GCM | AT |
|--|------------|----|----|-----|----|
| Mercuric iodide | 14836-60-3 | | 2 | | 1 |
| Mercurous nitrate, dihydrate, crystal, reagent | 1436-60-3 | | | | 1 |
| Mercury(II) chloride extra pure fine crystal | | | 2 | | 2 |
| Methyl green zinc chloride double salt for microscopy Certistain | | 2 | | | |
| Molybdenum trioxide | | 2 | | | |
| Molybdic acid 85% | 7782-91-4 | 2 | | | |
| N,N-Dimethylformamide | 68-12-2 | | 1B | | |
| Naphthalene for synthesis | 91-20-3 | 2 | | | |
| Nickel | 7440-02-0 | 2 | | | |
| Nickel chloride hexahydrate for analysis EMSURE ACS | 7791-20-0 | 1A | 1B | | |
| Nickel nitrate | | | 1B | | |
| Nickel sulfate hexahydrate | 10101-97-0 | 1A | 1B | | |
| Nitrobenzene | 98-95-3 | 2 | 1A | | |
| o-Phenylenediamine | 95-54-5 | 2 | | | |
| Oxalyl chloride | 79-37-8 | | | | 2 |
| p-Dichlorobenzene (reagent) | 106-46-7 | 1B | | | |
| Petroleum Ether | | 1B | | 1B | |
| Phenolphthalein | 77-09-8 | 1B | 2 | | |
| Phenylhydrazine hydrochloride | 59-88-1 | 1B | | | |
| Poly(ethylene-co-vinyl acetate) | 24937-78-8 | 2 | | | |
| Potassium bromate | | 1B | | | |
| Potassium pyrosulfate | | 2 | | | |
| Sodium borate decahydrate crystals GF ACS | 1303-96-4 | | 1B | | |
| Sodium borohydride for analysis | 7789-38-0 | | 1B | | |
| Sodium fluoride, ACS | 7681-49-4 | | | | 2 |
| Sodium perborate | 10486-00-7 | | 1B | | |
| Thallium(I) chloride | 7791-12-0 | | | | 2 |
| Toluene EMPLURA | 108-88-3 | | 2 | | |
| Vanadium(V) oxide | 1314-62-1 | | 2 | | |
| VOC Liquid Mixture - Modified | | 1A | | | |