# Safety Instruction

## **Chemical Inventory Guidelines**

All OSU groups that use or store chemicals must maintain an up-to-date chemical inventory in the EHSA on-line inventory system. Current inventories are required by OR-OSHA Laboratory and Hazard Communication standards, Oregon Fire Code, and other federal and state mandates.

OSU EH&S manages the on-line chemical inventory system and uses this information to maintain OSU's compliance with federal and state mandates. Access to the chemical inventory system is by ONID login; see "GO TO Inventory Program" located at: <a href="http://oregonstate.edu/ehs/cheminv">http://oregonstate.edu/ehs/cheminv</a>.

#### What should be included in your inventory?

Only manufacturer supplied or other primary containers of chemicals should be included in your inventory. Mixtures and solutions made from chemicals in these primary containers, including hazardous waste, should not be included as this leads to double-counting and over-reporting of quantities.

#### Chemicals that may be excluded from your inventory:

While EH&S recommends ALL chemicals be included in your inventory, certain chemicals with minimal physical or human health hazards may be excluded. **You may exclude:** 

- Water
- Non-hazardous buffers, sugars and salts (solid or liquid form).
- Growth media without toxic (to humans) components.
- Non-toxic biochemicals (e.g., nucleotides, enzymes, protein extracts, lipids, nucleic acids, etc.).
- · Commercial assay kits.
- Biological specimens (e.g., cell lines, blood or body fluids, antibodies, microorganisms, etc.).
- Radioactive materials reported under an OSU Radiation Use Authorization.
- · Hazardous waste.
- Retail products used for routine household-like activities (cleanser, dish soap, bleach, etc.) with a duration and frequency of exposure that is equivalent to a consumer's home use, and which do not appear on any of the lists in the next section.
- Drugs in solid, final form for direct administration to a patient.

### Chemicals that <u>must be included</u> within your inventory:

- Highly toxic materials: oral LD<sub>50</sub> ≤ 50mg/kg; inhalation LC<sub>50</sub> ≤ 200ppm (2mg/l), or dermal LD<sub>50</sub> ≤ 200 mg/kg.
- Toxic materials: oral LD<sub>50</sub> 50–500mg/kg; inhalation LC<sub>50</sub> 200–2000ppm (2–20mg/l), or dermal LD<sub>50</sub> 200–1000 mg/kg.
- Explosive materials as defined by the U.S. Dept. of Transportation, 49 CFR 172, Subpart B.
- Extremely Hazardous Substances as defined by 40 CFR 355, Subpart D.
- Flammable or combustible liquid, solid, or gas.
- · Carcinogenic, mutagenic, or teratogenic materials.
- Pyrophoric, water-reactive, or peroxide forming materials.
- · Compressed or cryogenic gas.
- Strong acids or bases
- · Reducing agents
- Oxidizers such as nitrates, iodates, perchlorates, or organic peroxides.
- Toxins of biological or synthetic origin (e.g., diphtheria toxin, conotoxins, endotoxins, cholera toxin, etc.)
- Controlled substances (<u>DEA listed materials</u>).
- Chemicals of Interest (<u>Dept. of Homeland Security listed materials</u>).
- Any other hazardous substance, not listed in previous bullet points, that has an NFPA 704 or HMIS hazard rating of greater than or equal to 1 <u>and</u> is stored in quantities of >50 grams or >50 milliliters. For the NFPA or HMIS ratings, consult the material's <u>Safety Data Sheet</u> or look it up in the chemical inventory program.

#### **Contact EHS:**

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