

Chemical Inventory Overview



What is a Chemical Inventory?

- Chemical inventories are simply put, a document that lists what hazardous chemicals are in a given space and how much of it is being kept.

Why Do We Need Chemical Inventories?

- Legal requirement (EPA, OSHA)
- Cost savings \$\$\$
- Environmental impact, waste reduction
- ***Facilitates the effective and timely response in the event of a spill or release***

UMBC Chemistry Building evacuated out of caution amid report of chemical spill



umbc SOURCE: UMBC

What gets included in a chemical inventory?

- **All *hazardous* chemicals and chemical products**
 - Anything with hazard pictograms or warning labels (i.e., toxic, flammable, corrosive, reactive, carcinogenic, oxidizer)

Common examples

- Compressed and liquified gases
- Liquid and Aerosol lubricants, paints, adhesives, solvents
- Fuels, oils (motor, pump oil, gasoline)
- "-Cides" (pest, herbicide, bio, fungi)
- Commercial/industrial cleaners and disinfectants
- Industrial or large equipment batteries (in equipment and in storage)



What does *not* get included in the inventory?

Anything considered non-hazardous

- Food grade or edible products
- Office or printing supplies
- One-time/same day use
- Hand soap, dish soap, small amounts intended for household use

Also exempt.

- Fuels stored/used in equipment (vehicles, generators, boilers)
- Consumer batteries (tools, laptops, car batteries etc.)
- Fuel storage tanks (AST, UST)

The general rule of thumb is...



Has an SDS?

No SDS?

Hazard Label Examples



NFPA "Diamond"



DOT Label



GHS (UN/OSHA)

Who completes the inventory?

ESH relies on departments to complete these because of the size of campus and the number of locations where hazardous chemicals are used and stored.

It can be a supervisor or employee. It should ideally be someone who has completed Hazard Communication training.

ESH is always available as a resource to provide consultation and guidance on developing and maintaining an inventory.

Inventory Management

- On at least an annual basis:
 - Conduct inventory
 - Submit chemical inventory to ESH
 - Retain copy of current inventory on file with your dept.
- Keeping a rolling inventory or updating more frequently is highly encouraged (esp. after major changes, large shipments, etc.)
- Retain inventory where it can be easily accessed.

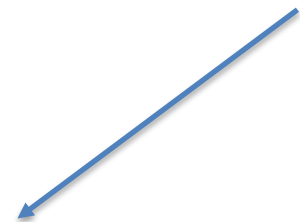


Inventory Format

- Can be in any format. Most people use an excel spreadsheet. Just needs to have the required information and be legible.
- ESH has a template on [Chemical Safety](#) web page under Additional Resources.
- **Required Information:**
 - Chemical Name - if it has one
 - If no chemical name - use either CAS number or concentration
 - Chemical owner (typically a supervisor or manager of the space)
 - Hazard class(es) – flammable, toxic, corrosive, etc.
 - Building Name
 - Room Number
 - Amount (number and units – oz's, liters, gallons, etc)
- Optional but helpful additional information
 - Specific location (i.e., flammable cabinet, top shelf)
 - Date received
 - Expiration date
 - Product number or lot number
 - Any additional notes (i.e., handling and storage requirements)

Additional resources

- [UMBC Chemical Hygiene Plan](#) 
- [Blank Chemical Inventory Import Sheet](#)



Shared or Multiple Spaces

- Inventories should be grouped by specific location or facility
 - For example, by shop, lab, maker space, studio
- Some departments may have multiple inventories if they have multiple spaces under their responsibility.
- Shared spaces should designate at least **one** person to be the inventory manager for the space and will coordinate with the other departments/units that share the space when conducting inventory.



Getting started

- Start with highest hazard, risk, or large quantities
- Conduct at a time of year that makes sense logistically/operationally

For Questions or Assistance

- Contact ESH
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