

TIER II REPORTING REQUIREMENTS

Frequently Asked Questions

Who must report?

If you store, use or produce chemicals, requiring maintenance of Material Safety Data Sheets (MSDS) under the Hazard Communication Standard, that are present in your facility in excess of the appropriate threshold, and are not exempt under Title III, then you must submit Section 311 and Section 312 (Tier II) reports.

How do I determine the "maximum amount"?

You must consider the daily (weekly, monthly) amounts (in pounds) of each reportable chemical at your facility. The amounts should vary as shipments increase your inventory and regular use depletes it. The "maximum amount" occurs for each chemical when its storage level reaches its highest point for that year. (Enter the appropriate two-digit code on the Amount Screen). The two-digit codes provide broad ranges (factors of ten) for indicating your storage levels. You do not need to be any more exact than these ranges.

Please note: reporting thresholds depend on the "maximum amount." For every reportable chemical, separate them into the five hazard categories. Add up all of the "maximum amounts" for the chemicals in each category. Chemicals that overlap several categories will be counted more than once.

How do I calculate the "average daily amount"?

Weights of reportable chemicals may be measured daily, weekly, or monthly as appropriate to your type of operation. For every reportable chemical, consider the number of days (weeks, months) that chemical is at your facility and compute its daily (weekly, monthly) storage weight. Then total these numbers and divide by the number of days (weeks, months) the chemical is on-site. Enter the appropriate two-digit code for the "average daily amounts." These codes offer broad ranges, and you need to calculate your "average daily amounts" only to the exactness of the ranges.

Separate all the reportable chemicals into their hazard categories. Then, total the "average daily amounts" of the chemicals in each category and enter the appropriate two-digit code on the form. Chemicals overlapping several categories will be counted more than once.

**What is the Chemical Abstract Service (CAS) number?
Where can I find it?**

The Chemical Abstract Service (CAS) number requested on the Tier II form is an informational aid for the Local Emergency Planning Committees (LEPC) and the New York State Emergency Response Commission. Although many chemical labels do not display the CAS number, Material Safety Data Sheets (MSDS) should. In addition, the List of Extremely Hazardous Substances and the List of Toxic Chemicals (Section 313) cite the CAS numbers of their chemicals.

For mixtures, which frequently do not have a specific CAS number, note the CAS numbers of as many of the components in the mixture as possible. If you are unable to locate the CAS numbers for a chemical, then submit the form without it. This requirement should not stop you from reporting accurately.

What is a "reportable chemical"?

As defined by the EPA, a "reportable chemical" refers to hazardous chemicals and extremely hazardous substances present at your facility in excess of the relevant reporting threshold and not exempt under Title III.

**How specific must I be in reporting "general location"?
Is a site plan necessary?**

For the Tier II form, you must indicate at least the building, lot, warehouse, shed, tank, field, etc. where the chemical is stored. On the Tier II form, where practical, the specific room in a building or quadrant of a field should also be noted. The EPA also recommends that you use a site-plan to indicate where chemicals are stored at your facility. Simply copy the facility plans and mark all appropriate storage areas for your reportable chemicals. Show all symbols and abbreviations in a complete, clear notation key.

How do I convert volumes of liquids and gases into weight (pounds)?

Only the weight of the substance needs to be reported and not the weight of the container. Most gases and liquids are sold by the pound, and these weights should be noted on the label. If so, then the weight can easily be estimated by multiplying the weight of a full container by the fraction of the volume remaining. If the liquid is not labeled in pounds, then you can calculate its weight by multiplying the volume of the liquid by its density. The density (mass per unit volume) should be noted on the Material Safety Data Sheet (MSDS). If not, then simply estimate the weight by the density of water. Be careful with your units of measure (gallons, liters, pounds, kilograms).

If the weight of the gas is listed on the cylinders label, base your calculation on this measure. You can obtain the "tare weight" (the weight of the cylinder without gas) either from the label or by subtracting the listed weight of the gas from the total weight of a full cylinder. Knowing the tare weight, you can chart the gas remaining in the cylinder by subtracting the cylinders tare weight from it total weight of that item. This procedure can be used for both liquefied and fixed gases.

**What is a hazard category?
How can I determine the appropriate hazard category?**

Under Title III, there are five physical (3) and health (2) hazard categories – Fire Hazard, Sudden Release of Pressure, Reactivity, Immediate (acute) and Delayed (chronic).

Hazard categories allow emergency responders to classify broadly the reportable chemicals present at your facility.

Many employers are already familiar with the physical and health categories designated under the OSHA Hazard Communication Standard (HCS). In addition, many Material Safety Data Sheets (MSDS) note a hazardous chemicals appropriate OSHA hazard category. For these reasons, the chart on the next page comparing the EPA – Title III categories with the OSHA – HCS categories should be useful. The link between the two is NOT EXACT and is provided for guidance only. Contact your supplier for any additional assistance.

Hazard Category Comparison for Reporting Under Sections 311 and 312

Reference: EPA Community Right-to-Know and Small Business, 9/88

EPA – Hazard Categories	OSHA – Hazard Categories
Fire Hazard	Flammable
	Combustible Liquid
	Pyrophoric
	Oxidizer
Sudden Release of Pressure	Explosive
	Compressed Gas
Reactive	Unstable Reactive
	Organic Peroxide
	Water Reactive
Immediate (Acute) Health Hazard	Highly Toxic
	Toxic
	Irritant
	Sensitizer
	Corrosive
	Other hazardous chemicals with an adverse effect on target organs that generally occurs rapidly because of short-term exposure and with a short duration.
Delayed (Chronic) Health Hazard	Carcinogens
	Other hazardous chemicals with an adverse effect on target organs that generally occurs because of long-term exposure and with a long duration.

Who can serve as an emergency contact?

Anyone who can be reached at all times to aid responders in the event of an emergency can serve as the emergency contact. Many facilities already post an emergency or "after hours" telephone number. That would be appropriate here. The emergency contact does not need to be an expert on chemical hazards, but must be able to act as a referral for responders. In case one emergency contact is not sufficient for 24-hour coverage, both the Tier I and Tier II forms have spaces for two emergency contacts.

Must I report a hazardous chemical that is on-site for less than 24 hours?

Yes. Under community Right-to-Know reporting, any hazardous chemical on-site for any length of time in excess of the established reporting threshold (and not exempt under Title III) must be reported.

What do the storage codes "ambient" pressure and temperature and "cryogenic conditions" mean?

"Ambient pressure" means the pressure of the surrounding area. Materials stored at ambient pressure are stored at the same pressure as that of the surrounding area. Most drums, bags, boxes, cans, etc. fit this category. Any gases stored in high-pressure containers should be reported as greater than ambient pressure.

Similarly, ambient temperature means that the material is stored in the same temperature range as that of the surrounding area. Outdoor storage tanks that are heated or cooled to counter variation in temperature should also be classified as ambient. However, a tank maintained at a high (or low) temperature not close to the normal range of temperatures of that region should be noted as greater (or lesser) than ambient temperature.

Some gases are stored under "cryogenic conditions," that is, they are stored at very low temperatures (-130 F or less). Examples of gases that may be stored this way include air, argon, carbon monoxide, ethylene, fluorine, helium, hydrogen, methane, nitrogen, and oxygen.

For assistance in determining a chemicals storage conditions, contact your supplier or your local trade association. The MSDS may also have some helpful information.

Do I have to report the hazardous components of a mixture?

Under Title III, the owner of a facility can choose to report all components of a mixture separately or the mixture as a whole. The decision is yours and should be made based on the substances at your facility.

For example, you can report the entire quantity of a particular paint stored at your facility as a bulk weight, noting the paint by its trade name in both Section 311 and Section 312 reports (Tier II). Alternatively, you could break down the various hazardous chemicals contained in the paint and calculate their respective weights. To do so, simply multiply the total weight of the mixture by the percentage of each hazardous component.

For example, if a compound comprises 5% of the paint by weight, and the quantity of paint at your facility was 10,000 lbs., then the amount of compound A would be $0.05 \times 10,000$ lbs, or 500 lbs.