



Hazardous Material Business Plan - Mixtures



The following information is provided to assist with understanding the Hazardous Material Business Plan program of the California Health and Safety Code [HSC], Chapter 6.95, Article 1, § 25500 to 25519. This information is not to be relied upon as legal advice or interpretation by the California Governor's Office of Emergency Services (CalOES) or the State of California. It does not create any rights, obligations, or establish any new standards. Local governments often have requirements that are more stringent than state and should be contacted for advice about this program in their area.

MIXTURES OR SOLUTIONS OF HAZARDOUS MATERIALS

For the purposes of the Business Plan program, the threshold quantity of the hazardous material that determines whether compliance with the program is required or not can be summarized as follows:

- 500 pounds of a hazardous material if a solid;
- 55 gallons of a hazardous material if a liquid; and
- 200 standard cubic feet of a hazardous material if a gas.

What about mixtures or solutions of these chemicals? And how is the threshold value of a hazardous material calculated if it is not pure substance?

HSC § 25501(m) defines a "hazardous material" as any material that, because of its quantity, concentration or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment, if released into the workplace or the environment.

HSC § 25507(a)(1) further states that any business that handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time during the reporting year that is equal to, or greater than, 55 gallons for materials that are liquids, 500 pounds for solids, or 200 cubic feet for compressed gas. The physical state and quantity present of mixtures shall be determined by the physical state of the mixture as whole, not individual components, at standard temperature and pressure

Therefore, if a facility has a mixture containing a hazardous material, as defined above, and this mixture still fits within the definition of a hazardous material, then the entire mixture must be included as part of the facility's hazardous material inventory.

EXAMPLE:

A facility has 30 gallons of 90% hydrochloric acid. This quantity does not meet the threshold value of HSC § 25507(a)(1), and the facility is not required to submit a business plan.

The facility's operator subsequently dilutes the 30 gallons of hydrochloric acid with 30 gallons of water. The result is 60 gallons of a material that, because of its concentration, physical and chemical properties, poses a potential hazard to human health and safety or the environment. The facility now possesses a reportable inventory, and must submit a business plan, even though 45% hydrochloric acid is arguably less hazardous than 90% hydrochloric acid.

To comply with federal regulations in regards to mixtures, business must follow the rules laid out in 40 CFR § 370.14 in regards to EPCRA.



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When determining whether the threshold quantity of an **extremely hazardous substance (EHS)** has been equaled or exceeded, a business must include the total quantity of the EHS present in the untouched form as well as in any mixture, even if any mixture including the EHS is also being reported as a hazardous chemical.

For hazardous chemicals that are mixtures and **do not contain any EHS**, businesses have an option when determining whether the threshold quantity is present:

- Add together the quantity present in its untouched form and as a component of all mixtures (even if the mixture is also being reported as a hazardous chemical). **OR**
- Consider the total quantity of each mixture separately.

For each specific mixture that a business reports, the reporting option must be consistent for both the MSDS and inventory reporting, unless it is not possible to do so. In other words, if you report a mixture as a whole for the MSDS reporting, you must report the mixture as a whole for the inventory reporting as well.

In order to determine the quantity of an EHS or non-EHS hazardous chemical component in a mixture, you multiply the concentration of the hazardous chemical component (in weight percent) by the weight of the mixture (in pounds).

You **do not** need to count a hazardous chemical present in a mixture if the concentration is less than or equal to 1%, or less than or equal to 0.1% for a carcinogenic chemical.

WHO DO I CONTACT IF I HAVE FURTHER QUESTIONS?



Contact your local [UPA](#).



If you have any questions regarding HMBP Submittals, please call the Cal OES Hazardous Materials Section @ (916) 845-8798



Additional Resources can be found on the Internet at the following locations:

www.caloes.ca.gov (California Governor's Office of Emergency Services)

www.calcupa.net (California Certified Unified Program Agencies)

www.epa.gov (Environmental Protection Agency)

www.leginfo.ca.gov (Official California Legislative Information)