



CHEMICAL CONTAINER LABELING

Introduction

With few exceptions, chemical containers used and stored at UNL must be labeled to identify their contents, and sometimes their associated hazards. Labeling is important to prevent accidental misuse and inadvertent mixing of incompatible chemicals. Proper labeling also facilitates quick decision-making and action in the event of an emergency (i.e., spillage, exposure, etc.), and avoids the expense associated with handling, management, and disposal of unknown chemicals. The content of this SOP is based on the following United States Occupational Safety and Health Administration (OSHA) regulations:

- Hazard Communication (29 CFR 1910.1200)
- Occupational Exposure to Hazardous Chemicals in Laboratories (29 CFR 1910.1450)

Persons handling hazardous chemicals should have completed EHS **Chemical Safety Training** (available on the EHS web site) and will therefore have familiarity with the terminology used in this SOP

Scope

Labeling of containers used for collection of spent or used (waste) chemicals is beyond the scope of this SOP. Consult the EHS SOP, **Hazardous/Radioactive Materials Collection Procedures**.

This SOP also does not apply to the following: Consumer products (e.g., hair spray); food and food products labeled in accordance with the Food, Drug and Cosmetic Act; samples and specimens received in a lab for testing when the exact composition is not known; and pesticides labeled in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act.

Labeling Requirements by Type of Container

Specific labeling requirements vary with the type of container.

- **Containers provided by a manufacturer** must be labeled with the following information: product identifier/chemical name; signal word (danger or warning); Hazard Statement(s); Pictogram(s); Precautionary Statement(s); and name, address, and telephone number of the manufacturer/distributor/other responsible party. Manufacturers' labels must not be removed or defaced. This requirement also applies to hazardous chemicals that are synthesized or produced and shipped off-site to another user. In this case, a Safety Data Sheet must also accompany the shipment.

- **Durable containers** is a term coined at UNL to mean chemical containers that are not provided by the manufacturer and which are intended for use that extends beyond a work shift or which will be shared by several employees. For example, a secondary stock solution prepared from a chemical received from a manufacturer is generally stored in a “durable container.”
 - In a laboratory setting, minimal labeling of durable containers consists of product identifier/chemical name¹ (concentration is recommended, but not required).
 - In non-laboratory settings, minimal labeling of durable containers consists of product identifier/chemical name and hazard class (e.g., flammable, oxidizer, corrosive, etc.) or applicable pictogram(s). Preferably, obtain secondary labels from the manufacturer/distributor that contain all of the information that would be contained on the label of a container supplied by the manufacturer/distributor.²
- **Transient containers** means those containers that will be used to hold chemicals for less than one work shift *and* that will be under the control of the person filling the container. No labeling is required for these containers until they are no longer under the control of the person who prepared the material. Examples include solutions that will be used immediately in an experiment and cleaning solutions that will be used by the end of a shift. *If a transient container is left unattended in an unsecured area, it must be labeled in accordance with the requirements for durable containers.*

Exceptions, Special Circumstances, and Other Considerations

- Use of *empty food containers* for storage of chemicals is not recommended. In the event it becomes necessary to use an empty food container for temporary chemical storage:
 1. Thoroughly deface all food labels and food references on the container.
 2. Clearly re-label the container in accordance with the above requirements.
 3. Affix a label “Not For Human Consumption” to the container.
- Small containers, such as vials and test tubes, can be labeled as a group by labeling the outer container (i.e., rack or box). Alternatively, a placard can be used to label the storage location for small containers (i.e., shelf, refrigerator, etc.).
- Any media can be used to label containers as long as it is resistant to smearing and fading. Old labels must be completely defaced or removed when reusing containers, unless the old label accurately describes the new contents.

Footnotes

¹Chemical name can mean an acronym or shorthand abbreviation *if* a cross-reference between the fully written chemical name and its associated short-hand name is posted in the work area.

²Containers of chemicals that do not meet OSHA’s definition of a hazardous chemical only require labeling with the product identifier/chemical name.