

# Management Bulletin

North Carolina State Laboratory of Public Health | Laboratory Improvement Unit

## OSHA Hazard Communication Update

In 2013, OSHA updated the Hazard Communication Standard (HCS). The HCS is now aligned with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). This update provides an understandable approach to classifying chemicals and communicating hazard information on labels and safety data sheets. As of December 1, 2013 all employees should have been trained on the new label elements and safety data sheet (SDS) format. Let's revisit the most important points to refresh your memory!

### Chemical Labeling

All chemical labels are now required to have standard information. This includes:

- Product identifier
- Name, address and telephone number of manufacturer/importer/responsible party
- Precautionary statement(s)
  - Describes measures that should be taken to prevent adverse effects from exposure
  - Examples include "Wear face protection" or "Wear gloves"
- Pictogram(s)
  - Symbols that convey specific information about a hazard
  - Determined by hazard classification
- Signal word
  - Danger-more severe hazards
  - Warning-less severe hazards
- Hazard statements
  - Describes the hazard(s) of a chemical
  - Examples include "Fatal if inhaled" or "Toxic if inhaled"

### Pictograms

As mentioned earlier, pictograms convey specific information about a hazard in an easy to read, simple format. The pictograms include:



#### Health hazard

Example: Carcinogen



#### Fire

Example: Flammables



#### Irritant

Example: Skin sensitizers



#### Gas

Example: Carbon dioxide



#### Corrosive

Example: Sulfuric acid



#### Explosives

Example: Self-reactives



#### Oxidizer

Example: Hydrogen peroxide



#### Environmental hazard

Example: Zinc oxide



#### Acute toxicity

Example: Benzene

## Safety Data Sheet(s)

The name has changed from Material Safety Data Sheets (MSDS) to simply Safety Data Sheets (SDS). Also, a new globalized format is in place so all SDS must have the same sections in the same order. Let's look at each section.

1. Identification
  - Product identifier, recommended use, and manufacturer contact information
2. Hazard(s) Identification
  - Classification, signal words, hazards, and precautionary statements
3. Composition/Information on Ingredients
  - For substances and mixtures
4. First Aid Measures
  - Description of necessary measures, subdivided according to the different routes of exposure
5. Fire Fighting Measures
  - Suitable extinguishing material, special precautions for firefighters
6. Accidental Release Measures
  - Emergency procedures, clean up and containment procedures
7. Handling and Storage
  - Precautions for safe handling and conditions for safe storage
8. Exposure Controls/Personal Protection
  - Permissible exposure limits, engineering controls and personal protective equipment
9. Physical and Chemical Properties
  - Appearance, flammability and odor
10. Stability and Reactivity
  - Possibility of hazardous reactions and conditions to avoid
11. Toxicological Information
  - Routes of exposure, symptoms, delayed effects, and immediate effects
12. Ecological Information
  - Ecotoxicity and degradability
13. Disposal Consideration
  - Safe handling and methods of disposal
14. Transport Information
  - UN number, proper shipping name, and special precautions
15. Regulatory Information
  - Safety, health and environmental regulations

## 16. Other Information

- Date of preparation of the SDS or the last change to it

## Summary

The latest Hazard Communication Update globalized labels and SDS in order to be more understandable and user-friendly. Keep this Bulletin as a reference for new chemical labels and SDS you may encounter. Remember, all SDS must be updated by June 1, 2015, so manufacturers should send new versions as they become available. You can be proactive by checking manufacturer's websites and ensuring the most updated version is in your laboratory. Educate all staff on changes and new labels.

Feel free to contact Laboratory Improvement at 919-733-7186 with any questions.

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## References

OSHA Hazard Communication Standard. <https://www.osha.gov/dsg/hazcom/>. Accessed September 12, 2014.

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Aldona Z. Wos, M.D., Secretary Division of Public Health [www.ncdhhs.gov](http://www.ncdhhs.gov) • [www.publichealth.nc.gov](http://www.publichealth.nc.gov)

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