

# **Understanding the Globally Harmonized System for the Classification and Labeling of Chemicals**

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One way governments and regulatory agencies help facilitate international trade – and improve employee safety along the way – is through the adoption of international standards for hazard communication.

One such initiative – OSHA's 2012 Hazard Communication Standard – seeks to align workplace hazard communication in the U.S. with the Globally Harmonized System (GHS). If you're confused about how the implementation of GHS is going to impact your business, you're not alone.

With key implementation deadlines approaching later in 2015, it's vital that companies know how the implementation of the GHS for Classification and Labeling of Chemicals impacts their company. The first step to understanding what GHS means is knowing what the regulations are actually regulating.

The bulk of the heavy lifting during the transition to GHS belongs to chemical manufacturers and distributors. However, businesses must be aware of several key requirements and changes including new chemical classifications, new safety data sheets (SDSs) and new labels.

## Understanding GHS for Classification and Labeling of Chemicals

In March 2012, OSHA revised its 1983 Hazard Communication Standard (HCS) by aligning it with the United Nations' global chemical communication system: the Globally Harmonized System for the Classification and Labeling of Chemicals (GHS). This action represented the single biggest change to workplace safety communication in nearly 30 years.

The UN adopted GHS a decade ago, and as of early 2013, 67 countries have folded GHS into their hazard communication standards. Without adopting HCS 2012, U.S. chemical manufacturers faced the risk of being shut out of many of the world's largest markets, including China and most of Europe.

GHS is about improving the hazard communication standard (HCS) that the Occupational Safety and Health Administration (OSHA) mandates for chemicals in the workplace. That means any potentially hazardous chemical in an office, warehouse, manufacturing area and shipping dock that requires a warning label and a Material Data Safety Sheet (MSDS) will probably need to be reclassified, relabeled and re-documented with a new Safety Data Sheet (SDS).

Keep in mind, however, that unless you actually manufacture the chemicals, you probably won't have to do the reclassifying, relabeling and re-documenting. That will be up to the manufacturers of the chemicals.

Businesses will still be responsible for training employees on the new standards and ensuring the labeling and documentation for the chemicals in the workplace comply with the new standards by June 1, 2016. Those who repackage chemicals for sale or distribution will have to ensure everything that goes out the door is compliant.

If you are a manufacturer of chemicals, hopefully you are well on your way with the GHS conversion, because after June 1, 2015, everything you make and ship will need to comply with the new standards.

### Getting the Picture with New Labels

One of the most visible aspects of the new OSHA regulations is a new, more informative labeling system for all containers of hazardous chemicals. Under the old system, there was a label requirement, and that was about all the detail provided.

The new system incorporates a standardized, pictogram-based format intended to assist employees in understanding the hazards associated with the chemicals they work with despite potential language barriers. The new labels now include the product identifier, signal word, pictograms, supplier identification, hazard statement(s) and precautionary statement(s).

It's important to remember that these labels are applied to each shipped container of hazardous chemicals. HCS 2012 may not require labels on the outside shipping container, but DOT labels may be required.

Several types of containers, most notably drums, chemical totes and tanks, serve as both the immediate container and the shipping packaging. In such cases, any required GHS label elements can be applied separately or combined with the DOT-required labels.

### From MSDS to SDS

The HCS 2012 also requires the conversion of current MSDS to SDS.

With the new SDS, chemical safety information is organized into 16 sections, providing consistency and harmonization for easy access to vital information.

The HCS 2012 (US 29 CFR 1910.1200) includes detailed instructions for gathering and organizing the information required to convert existing MSDS to SDS.

Consider enlisting a third-party provider to assist the conversion to SDS. When choosing this option, it's important to look for companies with prior environmental health and safety experience, particularly with regard to the chemicals with which you work.

Labelmaster, in partnership with Quantum, offers a full service MSDS to SDS conversion service to help businesses comply quickly and easily with the new GHS, removing the time-consuming burden from chemical manufacturers' internal staff.

### New Classifications for Chemicals

One of the most daunting aspects of OSHA's HCS 2012 is the need to reclassify hazardous chemicals. Under the outgoing HCS, "classification" was not formally defined because the standard required an "assessment of hazard" rather than classification. That changed in the HCS 2012, as "classification" is clearly mandated.

The responsibility for classifying a chemical starts with the manufacturer. Ideally, all manufacturers in the U.S. will have completed their HCS 2012 compliance efforts by the June 1, 2015 deadline, and all the chemicals will flow into commerce safely and compliantly.

Anyone who repackages the chemical for distribution can simply transfer the compliant label and SDS information. There would be no need to reclassify a chemical unless it is mixed with other substances.

Importers receiving chemicals from a country that doesn't follow GHS will have to perform the classification before allowing chemicals into the U.S. market.

For businesses in general, the only time a chemical will need to be reclassified is if it's believed the current information provided with the chemical is insufficient or incorrect.

### Key Implementation Dates

It's important that companies understand the remaining key compliance deadlines specified under HCS 2012:

- *June 1, 2015* – By this date, chemical manufacturers, importers, distributors and employers must comply with all modified provisions. All should have completed their reclassification of chemicals and be shipping GHS formatted SDS's and labels with their shipments.
- *December 1, 2015* – Distributors begin shipping containers labeled by the chemical manufacturer or importer with a compliant label.
- *June 1, 2016* – By this date companies must update alternative workplace labeling and hazard communication programs as necessary and provide additional employee training for newly identified physical or health hazards.

### In Conclusion

Reclassifying, labeling and re-documenting all the hazardous chemicals in this country is a huge undertaking. But it's extremely important, not only from a global commerce perspective, but from a risk management perspective as well.

It's important to remember that hazard communication serves two purposes: to help inform employees about the risks of exposure to harmful chemicals, and to help protect businesses from liability. By complying with the provisions of HCS 2012 by the required deadlines, businesses can help improve employee safety, reduce risk of liability and ensure operations proceed smoothly into the future.