

A New Standard for Classification and Labeling A Globally Harmonized System (GHS)

The United Nations (UN) GHS is a system for standardizing and harmonizing the classification and labeling of chemicals through new Safety Data Sheet (SDS) formats and Labeling requirements. The final regulation modifying the Occupational Health and Safety Administration (**OSHA**) **Hazard Communication Standard** to adopt the **Globally Harmonized System** has been published and the key deadlines for US American companies to come into compliance are now clear:

- Employers must **train employees** on the label and SDS elements by 1 Dec 2013.
- A **GHS safety data sheet (SDS) and label** must be provided for all hazardous materials, both substances and mixtures, by 1 June 2015.
- An additional 6 months, until 1 Dec 2015, is allowed for **distributors** to relabel containers they receive close to the compliance deadline for GHS labels.
- Final updates to **hazard communication programs** or other workplace signs will close out the adoption of the GHS approach on 1 June 2016.

The Importance of GHS

A common set of classification and communication

Many countries already have regulatory systems in place for these types of requirements. These systems may be similar in content and approach, but their differences are significant enough to require multiple classifications, labels and safety data sheets for the same product when marketed in different countries, or even in the same country when parts of the life cycle are covered by different regulatory authorities. This leads to inconsistent protection for those potentially exposed to the chemicals, as well as creating extensive regulatory burdens on companies producing chemicals. By utilizing a common set of classification and communication guidelines (including a defined and agreed set of pictograms), this complexity and confusion can be minimized.

Recently the US Occupational Safety & Health Administration (OSHA) aligned their Hazard Communication Standard with the United Nations Globally Harmonized System (GHS) of Classification and Labeling. Meanwhile in Canada, Health Canada is proposing new regulations titled Hazardous Products Regulations (HPR) that will incorporate the new GHS criteria for hazard classification and communication, and will amend and align Workplace Hazardous Materials Information System (WHMIS) to that standard. Mexico has already written UN GHS Version 3 into their *Norma Oficial Mexicana* (NOM).

CHANGES ARE COMING

Implementing the GHS change

In workplaces, hazards associated with the handling and storage of chemicals are communicated in two ways: via Safety Data Sheets (SDS) and labels, and with the BASF Corp North America will manage GHS adoption as a region.

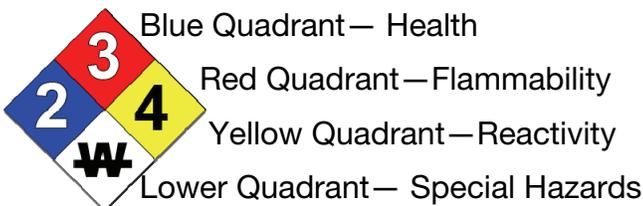
SAFETY DATA SHEETS (SDS)

With GHS, the term Material Safety Data Sheets (MSDS) will be replaced with the term Safety Data Sheets (SDS). The SDS will appear only slightly different from the MSDS currently provided, and will have 16 sections with their headings and content similar to the current International Organization for Standardization (ISO), EU (European Union), and American National Standards Institute (ANSI) MSDS/SDS requirements. The health and safety information will be located in different sections than previous MSDSs, therefore, additional BASF guidance will issue next year. Prior to the GHS implementation deadline of June 1, 2015, BASF will provide a new, GHS-compliant SDS for all of BASF's materials you may be handling. BASF's goal is to have the new SDS, with North American GHS Classification content, available in July, 2014.

PRINTERS

Because the new labels require color, those sites that have a need to print and apply Product Labels will, dependent on certain criteria, need to be provided new label printers, as well as installation and training in their use. A Printer deployment plan where applicable is being developed and printers will be deployed March-May of 2014.

NFPA SYMBOL



The color quadrants display a number from 0-4 indicating the degree of hazard in the container.

LABELS

In order to include all of the GHS required elements on the label, BASF must change almost all of its Product labels. Two of the changes will be the most noticeable: First, the new labels will include one or more hazard warning symbols/pictograms not on the current labels, and second, the new labels will include the National Fire Protection Agency (NFPA) 704 System symbol for the identification of the material's hazards. Hazardous Materials Information System (HMIS) information will no longer print on the label. The NFPA will print on the label as it is an Emergency Response notification system and is required in local jurisdictions, as well as, in Mexico. Both the pictograms and the NFPA systems are in color and will require the use of color printers when they are generated. The deadline for having new labels on BASF's inventory for shipment is June 1, 2015. To that end, the new labels with the required GHS content will start becoming available and begin to be applied to new production starting July 1, 2014.

PICTOGRAMS



BASF'S ROLE

What is BASF doing to comply?

Efforts to review and re-classify all of BASF's existing materials according to the new GHS standards are currently underway. At the same time, new SDS and labels are being designed to meet the new standard. Efforts are underway to identify how many new color-capable label printers are required as well as determining the type and vendor for those printers and the label stock to be used. Also, by December 1st of this year, GHS Hazard Awareness Training will have been completed by all of BASF's employees in North America.

TRAINING RESOURCE

ChemADVISOR, a regulatory consulting company, is offering a GHS E-learning course. US companies engaged in a business where chemicals are produced, used or distributed are required to train their employees in the new OSHA GHS label elements and safety data sheets (SDSs) by **December 1, 2013**. If you are interested in hearing more about this training course, please contact ChemADVISOR at:

info@chemadvisor.com 1 412-847-2000

(This notice does not constitute an endorsement of ChemADVISOR or its GHS E-Learning course by BASF Corporation. BASF is not affiliated with ChemADVISOR.)

MY ROLE

What will I have to do to comply?

Training – OSHA has stated the importance of training all target audiences to recognize and interpret label and/or SDS information, and to take appropriate action in response to chemical hazards. Training requirements should be appropriate for and commensurate with the nature of the work or exposure. Key target audiences include workers, emergency responders and also those responsible for developing labels and SDSs. To varying degrees, the training needs of additional target audiences have to be addressed. These should include training for persons involved in transport and strategies required for educating consumers in interpreting label information on products that they use.

GHS training will need to be provided by you to your employees and contracted employees and completed by the deadlines established in your jurisdiction.

For example, GHS Awareness Training in the US must be completed by December 1, 2013. As BASF North America (NA) GHS labels will become available July 1, 2014, we encourage those facilities located in the Mexico region and Canada to complete awareness training prior to the new label implementation.

MORE INFORMATION

Helpful links for GHS information:

OSHA:

<https://www.osha.gov/dsg/hazcom/index.html>

NFPA Quick Card:

http://www.nfpa.org/Assets/files/AboutTheCodes/704/NFPA704_HC2012_QCard.pdf

Canadian GHS Adoption Information:

<http://www.hc-sc.gc.ca/ewh-semt/occup-travail/whmis-simdut/ghs-sgh/index-eng.php>

Mexico GHS Adoption Information:

http://msds.3ecompany.com/files/mexico_ghs_071911.pdf