

## 2017-03 – Display of GHS Labels on Bulk Packages

*Created: Sept. 21, 2017*

### Summary

This Inspection Bulletin provides guidance on the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) pictograms or labels and their display on bulk packages while in transportation.

### Background

Questions have arisen as to whether the GHS pictograms or labels may be displayed (but are not required) on bulk packages while in transportation. The following is an example of GHS pictograms displayed in conjunction with and in proximity to a placard, marine pollutant mark and ID number on a tank:



The GHS pictograms are the two square-on-point graphics with white backgrounds, black symbols and red borders.

The applicable 49 Code of Federal Regulations (49 CFR) are:

#### **172.401(b) and (c)(5) Relating to Prohibited Labeling**

(b) No person may offer for transportation and no carrier may transport a package bearing any marking or label which by its color, design or shape could be confused with or conflict with a prescribed label.

(c)(5) The restrictions in paragraph (b) do not apply to packages labeled in conformance with the GHS.

#### **172.502(a)(2) Relating to Prohibited and Permissive Placarding**

No person may affix or display on a packaging any sign, advertisement, slogan or device that, by its color, design, shape or content, could be confused with any prescribed placard.

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On Sept. 19, 2016, the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) and the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) addressed this issue in a joint guidance memorandum titled, “Labeling of Hazardous Chemicals for Bulk Shipments.” This memo addressed 172.401 of the regulation for labeling hazardous materials in transport and OSHA’s Hazard Communication Standard (HCS), 29 CFR 1910.1200. Consistent with that memorandum, PHMSA issued Interpretation 16-0122 on July 25, 2016, to clarify that GHS pictograms visible in transportation and not displayed as a part of a complete GHS label would not meet the provisions of section 172.401(c)(5), and would therefore be subject to 172.401(b), which prohibits any marking or label which by its color, design or shape could be confused with or conflict with a prescribed label.

### Discussion

In accordance with HCS 1910.1200(f)(1), a GHS label is comprised of six elements:

- Name, address and telephone number
- Product identifier
- Signal word
- Hazard statement(s)
- Precautionary statement(s)
- Pictogram(s)

However, HCS section 1910.1200(f)(3) does not require all six of the elements to be located together on the label. Only three of the elements need to be located together on the label; the signal word, hazard statement and pictogram. Further, a single GHS label may display more than one hazard statement or pictogram.

The three elements required to be located together on the label are defined as:








*Signal word:* A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used are “danger” and “warning.” “Danger” is used for the more severe hazards, while “warning” is used for the less severe.

*Hazard statement:* A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical.

*Pictogram:* A composition that may include a symbol, plus other graphic elements, such as a border, background pattern or color, that is intended to convey specific information about the hazards of a chemical. GHS uses a total of nine pictograms; however, only eight are required by OSHA regulations. The environmental pictogram is not mandatory as it may be displayed on hazardous materials in transport.

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This chart depicts the nine GHS pictograms and their applicability:

<p><b>Health Hazard</b></p>  <ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive Toxicity</li> <li>• Respiratory Sensitizer</li> <li>• Target Organ Toxicity</li> <li>• Aspiration Toxicity</li> </ul>	<p><b>Flame</b></p>  <ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-Heating</li> <li>• Emits Flammable Gas</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>	<p><b>Exclamation Mark</b></p>  <ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin Sensitizer</li> <li>• Acute Toxicity (harmful)</li> <li>• Narcotic Effects</li> <li>• Respiratory Tract Irritant</li> <li>• Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
<p><b>Gas Cylinder</b></p>  <ul style="list-style-type: none"> <li>• Gases Under Pressure</li> </ul>	<p><b>Corrosion</b></p>  <ul style="list-style-type: none"> <li>• Skin Corrosion/ Burns</li> <li>• Eye Damage</li> <li>• Corrosive to Metals</li> </ul>	<p><b>Exploding Bomb</b></p>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<p><b>Flame Over Circle</b></p>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<p><b>Environment (Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<p><b>Skull and Crossbones</b></p>  <ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>

For the purposes of this guidance, the following is an example of a complete GHS label that would be authorized for display on a bulk package during transportation in the United States.



The example presents all three required elements on the label: The pictogram; the signal word, “Warning;” and the hazard statement, “Harmful if swallowed.”

The text on the label must be displayed in English; however, display of the text in other languages, in addition to English, is permitted. Other than the red border around the pictogram, there is no requirement for any border around the label.

Note that the additional elements associated with the GHS label may be included; however, these are the only three elements required by OSHA to be located together on the label.

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Further, except for a requirement that the elements of the label be legible and readable, there are no minimum or maximum sizes specified for the label or its elements, and there are no requirements concerning the relationship among the size of the individual elements. Therefore, a label could have the pictogram displayed in a size as large a placard, with smaller text elements.

### Guidance

CVSA-certified inspectors in the United States are not authorized to enforce any provision of the GHS or any OSHA regulatory requirement. This Inspection Bulletin is intended solely to provide guidance with respect to the appropriate application of section 172.401(b) when the display of a GHS label on a bulk package is encountered.

Consistent with PHMSA interpretation 16-0122, if a bulk package displays a complete GHS label as described in the previous discussion, in accordance with 172.401(c)(5), it is not in violation of 172.401(b) or 172.502(a)(2). However, a GHS pictogram or label displayed on a bulk package that does not constitute a complete GHS label (e.g., a pictogram alone or required label elements missing) would constitute a violation of 172.401(b) or 172.502(a)(2).

Further, any sign or advertisement similar to a GHS label, displayed on a bulk package, transport vehicle or freight container that due to its size and location clearly cannot be confused with any prescribed placard would not constitute a violation of section 172.502(a)(2), regardless of whether the sign or advertisement meets the minimum requirements for a complete GHS label.