



Hazard Communication Information Sheet reflecting the US OSHA Implementation of the *Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*

Produced by the SCHC-OSHA Alliance
GHS/HazCom Information Sheet Workgroup

Flammable Gases

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How does HazCom 2012 define flammable gases?

Flammable gases mean gases having any flammable range with air at 20°C (68°F) and a standard pressure of 101.3 kPa (14.7 psi). Aerosols are NOT classified as flammable gases.

How are flammable gases classified under OSHA HazCom 2012?

Classification as a flammable gas is determined based on the gases flammable range with air. It includes two (2) categories as indicated in the table below. Category 1 designates gases which at 20°C (68°F) and a standard pressure of 101.3 kPa (14.7 psi) are ignitable when in a mixture of 13% or less by volume OR have a flammable range with air of at least 12 percentage points regardless of the lower flammable limit. Category 2 means Gases, other than those of Category 1, which, at 20°C (68°F) and a standard pressure of 101.3 kPa (14.7 psi), have a flammable range while mixed in air.

Table 2 shows some of the label elements for flammable gases. The precautionary statements are not included due to space limitations of this fact sheet. See §1910.1200 for complete information.

Table 1: Classification Criteria

Category	Category 1	Category 2
Description	Gases, which at 20°C (68°F) and a standard pressure of 101.3 kPa (14.7 psi) that: (a) are ignitable when in a mixture of 13% or less by volume in air; or (b) have a flammable range with air of at least 12 percentage points regardless of the lower flammable limit.	Gases, other than those of Category 1, which, at 20°C (68°F) and a standard pressure of 101.3 kPa (14.7 psi), have a flammable range while mixed in air.

Table 2: Label Elements

Category	Category 1	Category 2
Pictogram		No symbol
Signal Word	Danger	Warning
Hazard Statement	Extremely flammable gas	Flammable gas

Additional Considerations

Classification of flammable gases are essentially based on tests or by calculation in accordance with ISO 10156 (incorporated by reference; See §1910.6). Where insufficient data are available to use this method, equivalent validated methods may be used.

How is classification applied to mixtures?

Mixtures are classified based on available data on the finished product (mixture as a whole).

To learn more...

- OSHA: Hazard Communication : <https://www.osha.gov/dsg/hazcom/index.html>
- SCHC site: <http://www.schc.org/osha-alliance>

The information contained in this sheet is believed to accurately represent current OSHA HCS requirements. However, SCHC cannot guarantee the accuracy or completeness of this information. Users are responsible for determining the suitability and appropriateness of these materials for any particular application.

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