

Global harmonized system

Literature, Russian Literature



Global Harmonizing Global harmonized system The Global Harmonized System was designed to ensure that all countries had a standardized classification and labeling of hazardous chemicals. Initially, countries venturing into the trade of chemicals used their symbols to represent different classifications of the same chemical substance. For example, different countries developed their own symbols for acute toxicity in different chemicals (Kutz. 2009). However, this proved to be challenging during trade as the symbol was probably used for a different level of toxicity. As a result, the importing country would not apply the necessary precautions as expected.

From the Global Harmonized System classification scheme, acute toxicity is classified under health hazards. Toxicity may be transmitted through oral methods, dermal methods or through inhalation (Kutz. 2009). The standardized symbol for acute toxicity is a skull with cross bones, or an exclamation mark. The exclamation mark applies in chemical hazards that may cause damage to specific body organs. This will allow countries exporting and importing acutely toxic substances to understand the necessary precautions to be applied, in countries that have implemented the Global Harmonized System.

The acute toxicity grid was designed by the United Nation to help in the monitoring of effects of oral or dermal administration of multiple or single dose of a substance within a period of 24 hours. If a chemical substance has an oral LD50 of 295 mg/kg body weight, the GHS category for acute toxicity is category 3 (United Nations, 2007). This is because it is close to the maximum range mark of 300 mg/kg body weight. The inhalation LD50 range

that will give a category 3 classification for acute toxicity is 50-300 mg/kg body weight.

References

United Nations. (2007). Health Hazards, 3: Geneva. United Nations. 1(3)

Kutz, M. (2009). Environmentally conscious materials handling: Hoboken, New Jersey. Wiley