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Ghs label example

The Globally Harmonized System was developed decades ago in order to help create a standard for the labeling and classification of chemicals that could be used by companies around the world. Prior to this standard, companies shipping or receiving chemicals would have to relabel and classify them to comply with local ways of doing things. This could be very costly, and worse, could expose people to unnecessary risks associated with this process.Why was GHS developed?The United Nations helped to facilitate the creation of GHS, and continues to manage it today. They work with companies and countries around the world to come up with the best and most effective standards for the classification and labeling of hazardous chemicals. Having this one centralized standard is necessary and important for keeping employees, facilities, and the environment safe. When implemented properly, it can provide the following key benefits:Overcoming Language Barriers - GHS uses pictograms to convey information regardless of the language people speak.Universal Standard - Having the one standard throughout the world makes it easier for companies to work together.Cost Savings - No matter where a chemical comes from or is shipped to, the labeling standards will be the same so they don't need to be redone.Improved Safety - The most important benefit is that having a single standard that is followed makes working with hazardous chemicals much safer for everyone involved.Voluntary AssociationAnother great thing about GHS is that while it is managed by a centralized group (the UN) it is followed voluntarily by companies around the world. The UN has no enforcement power behind GHS, but businesses continue to adopt the practices because it has been proven to be the most effective way to label and classify hazardous chemicals. Many individual country governments, including the US through OSHA, have even made changes to existing standards in order to comply with the GHS because of its effectiveness and popularity.Similar Questions Additional Resources There are thousands of hazardous chemicals used and transported for commercial purposes. The GHS standard streamlines all this information by grouping chemicals into classes. There are 29 GHS hazard classes that describe the hazard type and sometimes a chemical's current state (liquid, solid, or gas). Hazard classes are broken down into three main types: physical hazards (17 classes), health hazards (10 classes), and environmental hazards (2 classes). Since there are only 9 GHS pictograms for 29 classes, not every hazard class has its own symbol. Instead, the GHS pictograms represent multiple hazard classes with a similar type and level of risk. GHS Hazardous Symbols and Meanings GHS pictograms are designed to draw your attention to a certain type of risk. They provide important, instantly recognizable information, but you may notice that some very different hazards get grouped together below. That's because hazard symbols never stand alone. They're just one part of a standardized GHS label that provides more details about how to safely handle each substance. Multiple hazard pictograms can appear on a label when they apply. GHS pictograms may also be used on hazard signs to encourage caution in a specific storage or work area. Health Hazard Symbols and Meanings There are four GHS symbols used to warn about health hazards like poisoning, tissue irritation, or causing disease. All of the health hazard symbols mean you need to keep containers tightly closed until you've read more information and taken the recommended precautions. Toxic GHS Symbol The skull-and-crossbones GHS pictogram, widely known as the toxic symbol, represents chemicals with the highest levels of acute toxicity. That means these chemicals have an immediate and severe (even lethal) effect on human health. Depending on the chemical, exposure may occur by inhaling, ingesting, or making skin contact with the substance. You'll find the particular exposure route(s) elsewhere on the label. Harmful GHS Symbol The GHS pictogram with an exclamation mark is used on substances that are harmful or irritating. The health effects are acute (set in quickly), but they're less severe than something marked with the toxic symbol. Chemical classes include: Skin, eye, or respiratory tract irritants Skin sensitizers, which cause an allergic response The lowest level of acutely toxic chemicals Materials with narcotic effects (drowsiness, lack of coordination, and dizziness) Specific warnings and precautions will appear on the label. Health Hazard GHS Symbol The health hazard pictogram is used for substances that present a health hazard over time. Chemical classes include: Carcinogens, which cause cancer Respiratory sensitizers Agents with reproductive toxicity that affects fertility or in utero development Chemicals with target organ toxicity Mutagenic chemicals that cause genetic defects Substances with aspiration toxicity You can learn about the specific health risk(s) in the label's text. Physical Hazard Pictogram Meanings There are five GHS symbols used to warn about physical hazards, which are characteristics that can put both property and human safety at risk. Corrosive GHS Symbol The corrosive GHS pictogram represents substances that eat away at a material when they make contact. This symbol covers both physical and health hazard classes - that's why it depicts both a hand and a surface. Chemical classes include: Skin corrosion or burns Eye damage Corrosive to metals The GHS label will specify which materials or exposure routes can be corroded by a substance. Like all health hazard symbols, you should leave the container tightly sealed until you know more. Also, you'll need to consider the types of tools or containers you can safely use. Explosive GHS Symbol The explosive GHS pictogram marks a chemical as unstable and capable of causing a fire or explosion. Chemical classes include: Explosives Self-reactive chemicals Organic peroxides The explosive pictogram means you need more information before you come anywhere near that container. Different chemicals can be set off under different conditions, including friction or mechanical shock - even bumping these containers with another object may be dangerous. Flammable GHS Symbol The flammable GHS pictogram is used on chemicals that emit flammable gas or could self-ignite when exposed to water or air. Chemical classes include: Flammable gases, liquids, and solids Pyrophoric materials Self-reactive materials that aren't also explosive Organic peroxides that aren't also explosive Water-reactives This pictogram means you should leave the container tightly closed and away from any sources of heat until you know more. You also need to be careful about changing any storage conditions, including what other substances or materials get placed near these containers. Oxidizing GHS Symbol The oxidizing GHS pictogram is used for oxidizing solids, liquids, and gases. These chemical classes, when exposed to oxygen, help ignite substances that wouldn't otherwise combust and/or make fires burn hotter and longer. Like the flammable symbol, this pictogram also means you should leave the container tightly sealed until you know more. Don't change storage conditions or put other materials near these containers until you know what's safe. Compressed Gas GHS Symbol The compressed gas GHS pictogram is used on gases that are stored under pressure. Chemical classes include: Compressed gases Liquefied gases Refrigerated liquefied gases Dissolved gases Containers with this hazard symbol may explode if heated. It's best not to even touch these containers until you know more because some require special handling precautions. Environmental Hazard GHS Symbol Only one of the GHS & OSHA pictograms addresses an environmental hazard. The environmental hazard GHS pictogram indicates that a chemical is toxic to aquatic wildlife. This is the only GHS symbol that's not mandatory. When you see this symbol, disposal of the substance may require a specific method. You also need to take precautions against release into the environment during use or transportation. How Do You Learn More About Hazard Signs and Meanings? GHS pictograms are just one aspect of OSHA's Hazard Communication Standard. Hazardous symbols and their meanings can't keep you safe by themselves. You need complete GHS labels, Safety Data Sheets, HazCom training, and more. Other parts of standardized GHS container labels provide information that's immediately useful to someone handling a chemical. That includes signal words, hazard statements (like Fatal if Swallowed), and recommended safety measures for prevention, response, storage, and disposal. Safety Data Sheets are even more detailed, with sections that provide instructions during an emergency. OSHA requires HazCom training for workers who will be exposed to hazardous chemicals under normal working conditions. They need to learn what the pictograms mean, where to find important label information, what you can learn from a Safety Data Sheet, and the properties of chemicals in the hazard classes they're likely to encounter. One convenient way to fulfill the general information parts of your mandatory HazCom/GHS training is to take an online course with a reputable, OSHA-authorized provider like us. Our GHS/HazCom course covers the concepts you need to learn in a self-paced format. Enroll today! Little Pro on 2015-12-30 NFPA 704 rating system is a standard system developed by the U.S.-based National Fire Protection Association (NFPA) for indicating the health, flammability, reactivity and special hazards for many hazardous chemicals through the use of the NFPA 704 Diamond. In this article, we will give you a brief introduction to NFPA rating criteria and compare NFPA 704 labels with HMIS labels and the new GHS labels under OSHA's revised Hazard Communication Standard (HCS). NFPA Rating Criteria and NFPA Labels The picture below shows NFPA rating criteria and a typical NFPA 704 label. Different colors represent different types of hazards. A number rating system of 0-4 is provided to rate each of the four hazards and is placed on a placard. 0 represents the least hazardous while 4 represent the most hazardous. If you are interested in finding out detailed NFPA rating criteria in text, please click this Wikipedia summary Comparison of NFPA 704 Labelling and HMIS Labelling Hazardous Materials Identification System (HMIS) is a voluntary hazard rating scheme developed by American Coating Association (ACA) to help employers comply with workplace labeling requirements of the U.S. Occupational Safety and Health Administration's (OSHA) revised Hazard Communication Standard (HCS). HMIS also communicates in-plant chemical hazard information through the use of colors, numbers and letters of the alphabet (see example below). As two popular workplace labelling systems in pre-GHS area in the United States, HMIS and NFPA labelling systems do appear quite similar; both have four sections colored blue, red, yellow and white. However, there are many differences between HMIS and NFPA labels. Target Audience HMIS label is intended to be used by employers and workers; NFPA label is intended to be used by emergency response personnel; Label Shape HMIS uses bar shape; NFPA uses diamond shape; Health Hazard Communication HMIS covers both acute and chronic health hazards; NFPA only covers acute health hazards; White Section HMIS uses this section to show the recommended personnel protective equipment (PPE); NFPA uses this section to display other special hazards. NFPA 704 Labels vs OSHA HazCom Labels Even though NFPA labels are not required by OSHA's Hazard Communication Standard (HCS 2012), they are not going to be replaced by OSHA's HazCom Labels (GHS Labels). There are many differences between NFPA 704 labels and OSHA HazCom Labels. For example, NFPA labels are usually posted on the two exterior walls of a facility, access to a room or storage area while OSHA HazCom Labels are affixed on chemical containers. The picture below is an official comparison of NFPA 704 labels and HazCom 2012 Labels. By clicking the picture, you can download the full comparison. Related Regulations and Standards More Readings: How to Determine NFPA 704 Ratings? For many common chemical substances, NFPA 704 ratings have already been determined. You may click the link below to search them. In the event that you need to determine your own NFPA ratings (especially for mixtures), you must get a copy of SDS first, obtain the information under the following sections of the SDS and assess them against NFPA 704 rating criteria provided above. Health hazard information under Section 11 Flammability information under Section 9 (flash point, etc.) Instability information under Section 10 Special information under Section 9, 10, 11 Reference & Resources Click here to access all references and resources for USA including the English translation of regulations, regulatory lists and useful links to the websites of competent authorities. Having Questions? We do not provide consultancy services. If you have questions or need any help, please contact our sponsor. You may also find an expert in CSP business directory below. If you are a consultant, you may get yourself listed in CSP business directory (free) or sponsor this page to leave your contact info on this page.. Tags: Topics - USA, GHS Basics and Tutorials Little Pro on 2016-01-06 It is generally expected that the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) will be adopted for pesticides. The biggest impact of GHS on pesticides will be pesticide classification and product labels. While GHS has been adopted for industrial chemicals in workplace by a significant number of countries, many of them still follow the FAO Guidelines on Pesticide Registration and the FAO Guidelines on Good Labelling Practice for Pesticides (rather than GHS) to carry out pesticide hazard classification and prepare pesticide labels. In this article, we have analyzed how GHS may impact pesticide labelling and classification and analyzed the current situation of GHS adoption in pesticides sector: GHS and Pesticides Classification GHS uses hazard class and hazard category to describe the nature and severity of chemical hazards. There are currently 29 hazard classes in GHS, among which the following classes are commonly seen on pesticides. It is expected that chemical classification criteria for above hazard classes will be introduced for pesticides. It shall be noted that there is no hazard class for terrestrial animals (e.g., bees, mammals) in GHS. Different authorities may consider adding extra hazard classes for terrestrial animals when adopting GHS for pesticides. The following GHS pictograms would be the most commonly used on pesticide labels in the future. GHS and Pesticides Labels A GHS label can also be used for pesticides after slight modification. A typical GHS label for an industrial chemical includes the following basic elements: Product identifier: Chemical identities of a substance or hazardous ingredients in a mixture; Supplier identification: The name, address and telephone number of a supplier; Signal word: Danger or Warning; Hazard pictogram: conveying different types of chemical hazards; Hazard statements: standardized and assigned phrases that describe the hazard(s) as determined by hazard classification; Precautionary statements: standardized phrases that describe measures to minimize or prevent adverse effects; An example of a GHS label for an industrial chemical can be found below: In general, active ingredients, bulk pesticide formulations destined for reformulation, repackaging or disposal, or other pesticide formulation components are considered as industrial chemicals if they are not intended for direct use. It is recommended that classification and labelling of these compounds follow the GHS. Workers will reply on GHS labels for hazard information. Similarly, the contents and layout of safety data sheets (SDS) that may accompany pesticide shipments or consignments should follow the provisions of the GHS. However, the registrant must ensure that the SDS which accompanies the product is consistent with the approved label. Furthermore, the UN Recommendations on the Transport of Dangerous Goods - Model Regulations provide specific guidance on labelling and marking for transporting pesticides that belong to dangerous goods. It is generally expected that a GHS pesticide label for end use products will need to include additional information. The extra required info may include instructions for use, content of AIs, requirements for personal protective equipment, re-entry intervals, and first aid statements. Important Note: Since pesticides are usually supplied in small packages, a label may not be big enough to include all GHS relevant info. Please read this good presentation on GHS labelling considerations for small containers given by Yunbo Shi at SCHC Meeting. For some countries, risk-based GHS labelling may be adopted for end-use pesticides instead of regular GHS labelling, which is usually hazard-based. Adoption of GHS for Pesticides in the United Nations Adoption of GHS for Pesticides in EU/EEA Has adopted GHS for plant protection products and biocidal products via CLP Regulation (EC Regulation on Classification, Labelling and Packaging of Substances and Mixtures, EC 1272/2008); Plant protection products and biocidal products must be classified and labelled in accordance with GHS/CLP from 1 June 2015 (1 Dec 2010 for pure AIs); Additional labelling info required: the name and amount of each active substance, net quantity, batch number, the type of action of the product, the type of preparation, the authorized uses, the sentence "Read accompanying instructions before use" and directions for safe disposal of the product and its packaging; EU pesticide GHS label: Please see the picture given below. Source: ECHA Guidance on CLP Classification and Labelling (page 45); Adoption of GHS for Pesticides in Turkey Adoption of GHS for Pesticides in Australia Adoption of GHS for Pesticides in USA Adoption of GHS for Pesticides in China Has not adopted GHS for pesticides yet; Pesticides do not need to be labelled in accordance with GHS labelling standard GB 15258 - General Rules for Preparation of Precautionary Label; Is revising its guidance on pesticide MSDS preparation which is aligned with GHS; Source: GB 15258; Adoption of GHS for Pesticides in Japan Adoption of GHS for Pesticides in Korea Adoption of GHS for Pesticides in Other Countries Philippines: planned, deadline not clear; Thailand: planned, deadline not clear; Vietnam: planned, deadline 2020. Having Questions? We do not provide consultancy services. If you have questions or need any help, please contact our sponsor. You may also find an expert in CSP business directory below. If you are a consultant, you may get yourself listed in CSP business directory (free) or sponsor this page to leave your contact info on this page.. Tags: Topics - GHS, GHS Basics and Tutorials Flexible LMS Solutions: Leverage our top-rated Learning Management System (LMS) with access to all training records and advanced reporting, or integrate easily with your existing platform Personalized Support: Benefit from a dedicated account team providing support for implementation and ongoing management Corporate Incentives: Receive custom pricing and flexible payment options tailored to your business needs OSHA, the Occupational Safety and Health Administration, was created in 1970 to prevent dangerous working conditions. They require workers to complete safety compliance training courses covering lessons on eliminating or diminishing occupational injury, illness, and death to achieve this goal. OSHA.com online courses are here to assist U.S. employers in staying compliant with training obligations outlined in OSHA Standards. Note: There is technically no such thing as "OSHA certification." By completing an OSHA Outreach Training Program course, graduates earn either a 10-hour or 30-hour OSHA DOL card. OSHA training is becoming mandatory in more states and industries every day. Online training is the most convenient way to take OSHA-authorized training. Enroll online, complete the training at your own pace, and receive your certificates and cards online or in the mail. OSHA Outreach courses are provided in partnership with 360training.com, an OSHA-authorized online Outreach Provider. OSHA.com is a privately-owned website that is not affiliated with any government agency. While OSHA does not officially "certify" individuals, you can earn a 10-hour or 30-hour OSHA DOL card by completing an authorized OSHA Outreach Training course. To do so, you must: Enroll in a course through an OSHA-authorized training provider like us. Complete the curriculum, which covers essential topics in workplace safety. Pass the final exam to demonstrate your understanding of the material. Receive a certificate of completion immediately, with your official DOL card arriving within approximately two weeks. Share — copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt — remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution — You must give appropriate credit , provide a link to the license, and indicate if changes were made . You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. 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