#### **Flame**

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable
   Gas
- Self Reactives
- Organic Peroxides

### **Exclamation Mark**

- Irritant
- Skin Sensitizer
- Acute Toxicity (harmful)
- Narcotic Effects
- · Respiratory Tract Irritation
- Hazardous to Ozone Layer

#### **Health Hazard**

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

### **Gas Cylinder**

 Gases Under Pressure



# Skull & Crossbones

Acute Toxicity (Severe)



# Flame Over Circle

\*Oxidizers



# GHS Pictograms



### **Corrosion**

Corrosives



- Explosives
- Self Reactor
- Organic Peroxides

# Environmental Hazard

Aquatic Toxicity









# GHS Pictograms

GHS stands for Globally Harmonized System of Classification and Labeling of Chemicals .

The goal of GHS is to prevent injuries and illnesses, save lives and improve trade conditions for chemical manufacturers. The 1983 Hazard Communication

Standard allowed chemical manufacturers and im-

porters to convey hazard information on labels and material safety data sheets (MSDS) in whatever format they chose. GHS provides a single set of harmonized criteria for classifying chemicals according to their health and physical hazards and specifies hazard communication elements for labeling and MSDS. The GHS hazard pictograms are intended to replace older systems used internationally.

- **Hazard pictograms** form part of GHS. Two sets of pictograms are included within the GHS: One is for the labeling of containers and for workplace hazard warnings. A second set of pictograms is used during the transport of dangerous goods. Either one or the other is chosen, depending on the target audience, but the two are not used together. The two sets of pictograms use the same symbols for the same hazards, although certain symbols are not required for transport pictograms. Transport pictograms come in wider variety of colors and may contain additional information such as a subcategory number.
- **Hazard statements and pictograms** are key elements under GHS for labeling of containers along with:
  - \* a signal word either **DANGER** or **WARNING** where necessary
  - \* hazard statements, indicating the nature and degree of the risks posed by the product,
  - \* <u>precautionary statements</u>, indicating how the product should be handled to minimize risks to the user (as well as to other people and the general environment)
  - \* the identity of the supplier (who might be a manufacturer or importer)
  - \* an identification of the product

**4-Year GHS Compliance Timeline**—OSHA will allow employers the following phase-in or transition period to comply with the new GHS requirements:

<b>December 1, 2013</b> All employers that use, handle, store chemicals	Train employees about the new chemical labels and safety data sheets or SDSs (formally material safety data sheets or MSDSs).
June 1, 2015 Chemical manufacturers, importers, distributors	Comply with all the requirements of the GHS rule, except voluntary compliance with GHS label until December 1, 2015.
	All shipments of chemical containers must include the GHS-compliant label (signal word, pictogram, hazard statement, and precautionary statement).
Hijne 1 2016	Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.

**References**—From Wikipedia, the free encyclopedia, *Globally Harmonized System of Classification and Labelling of Chemicals* (Second revised ed.), New York and Geneva: United Nations, 2007, <u>ISBN 978-92-1-116957-7</u>, ST/SG/AC.10/30/Rev.2, <a href="http://www.unece.org/trans/danger/publi/ghs/ghs rev02/02files e.html">http://www.unece.org/trans/danger/publi/ghs/ghs rev02/02files e.html</a> ("GHS Rev.2")