HAZARDOUS CHEMICALS:
PLACARDS & LABELING

Introduction
This fire safety information sheet assists authorities having jurisdiction (AHJ) with labeling requirements for hazardous materials under various regulations of the Department of Transportation (DOT), Occupational Safety and Health Administration (OSHA) and the Minnesota State Fire Code. Any reference to the fire code is based upon the 2020 Minnesota State Fire Code (MSFC).

There is some confusion on what is required for labeling products since the HazCom 2012 and Globally Harmonized System (GHS) were introduced. This information sheet makes these regulations clearer. Each of these three hazard identification systems (DOT, NFPA 704 and GHS) are for use in a specific transport, storage, handling or information purpose. Each hazard identification system must be used as specified in the applicable code or standard. One hazard identification system does not supersede the other and they are not interchangeable.

More information is available from the State Fire Marshal Division at 651-201-7221. Email questions to fire.code@state.mn.us or check out our website for the latest information on fire in Minnesota.

Department Of Transportation (Dot) Placards

Placards
Train rail cars and highway trucks are required to be placarded per Title 49 of the Code of Federal Regulations. Placards must be visible from both sides and both ends.

ID Numbers
Many chemicals have four-digit ID numbers displayed on the placard with the threat the material poses. The UN/NA numbers are listed in an Emergency Response Guidebook published by the DOT.

Purpose of Placards
The placard number and the Emergency Response Guidebook gives emergency response personnel the information they need to respond to incidents on the road or railway appropriately.

Minnesota State Fire Code Signs

Signs
Unless otherwise exempted by the fire code official, visible hazard identification signs as specified in NFPA 704 for the specific material contained shall be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities requiring a permit and at specific entrances and locations designated by the fire code official.
NFPA 704
Signs shall be in locations approved by the AHJ and as a minimum shall be posted at the following locations:
- Two exterior walls or enclosures containing a means of access to a building or facility.
- Each access to a room or area.
- Each principal means of access to an exterior storage area.

OSHA/Hazcom 2012 Product Labeling
Requirements
Chemical manufacturers or importers are required to classify the hazards of chemicals they produce or import. All employers must provide information to their employees about the hazardous chemicals to which they are exposed. That information can be provided in the following ways:
- By means of a hazard communication program.
- Labels and other forms of warning.
- Safety data sheets.
- Information and training.
In addition, this section requires distributors to transmit the required information to employers.

Label Requirements
Requirements for labeling of hazardous chemicals by the Hazard Communication Standard (HCS) can be found at the OSHA website. Click on the labeling tab for more information.

Safety Data Sheets
Safety Data Sheets (SDS), formerly Material Safety Data Sheets, shall meet the requirements established by the HCS. This requires new SDSs to be in a uniform format, and include section numbers, the headings, and associated information under the heading. AHJs should not review SDSs that are not in compliance with the new requirements.

MSFC
Section 5003.5.1 requires individual containers, cartons or packages to be conspicuously marked or labeled in an approved manner. The approved manner shall be the requirements established by OSHA and HCS.

Significant Dates
Employers were to train employees on the new labeling and SDS requirements by Dec. 1, 2013. Chemical manufacturers, importers, distributors and employers were to be in compliance by June 1, 2015. All new hazardous chemicals were to be labeled per the new requirements by June 1, 2015.

Summary
DOT placards provide information to emergency personnel on the contents of vehicles, rail cars and other containers transporting hazardous chemicals. NFPA 704 signs provide information to emergency personnel on health, flammability, instability, and special hazards contained inside a room or container. HCS requirements provide information for employees on products containing hazardous chemicals.