



**EXAMPLE**

Use of hazardous materials and chemicals is diverse and ever increasing. However, during an emergency event its important emergency response personnel are made aware of the hazards involved while they mitigate the emergency conditions.

The International Fire Code (IFC) sets forth requirements for hazard identification signs to be installed on stationary containers, above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled.

## STANDARDIZED MARKING SYSTEM

The standardized hazard identification system is a color-coded array of numbers or letters arranged in a diamond shape. The hazard level increases as the numbers increase (0 – 4 rating). This Marking System developed by the National Fire Protection Association (NFPA 704 Standard) was designed to alert emergency personnel of the type and degree of hazards within an area enabling them to more easily decide whether to evacuate the area or to implement control procedures. This standard marking system is not applicable to chemicals being transported or for use by the general public.

## SYMBOL DESCRIPTION



**Blue** quadrant (left) indicates **Health** hazard

- 0 – No hazard
- 1 – Can cause irritation if not treated
- 2 – Can cause injury. Requires treatment
- 3 – Can cause serious injury despite treatment
- 4 – Can cause death or major injury despite treatment



**Red** quadrant (top) indicates **Flammability** hazard

- 0 – No hazard
- 1 – Ignites after considerable heating

2 – Ignites if moderately heated  
3 – Can be ignited at all normal temperatures  
4 – Very flammable gases or very volatile flammable liquid



**Yellow** quadrant (right) indicates **Reactivity** hazard

- 0 – Normally stable. Not reactive with water
- 1 – Normally stable. Unstable at high temperatures and pressure. Reacts with water
- 2 – Normally unstable but will not detonate
- 3 – Can detonate or explode but requires strong initiating force or heating under confinement
- 4 – Readily detonates or explodes



**White** quadrant (lower) contains symbols indicating **Special** hazards. If blank, no special hazards are present.

- W – Denotes the material is water reactive
- OX – Denotes an oxidizing agent
- ACID – Denotes acid hazard
- ALK – Denotes alkali hazard

## GENERAL INFORMATION

The NFPA hazard ratings are separate and specific for each hazardous material or chemical. The hazard ratings can be found on the Material Safety Data Sheet (MSDS) for a given chemical, and often is on the label of commercial products.

Where many chemicals are present, a single sign shall summarize the **maximum** ratings contributed by the material(s) in each category.

## SIGN SIZE

The signs need to be permanent, durable, and legible from a distance.

Distance hazard ratings are legible	Minimum size of hazard ratings	Size of sign
50 ft	1 inch	2 ½ inch
75 ft	2 inch	5 inch
100 ft	3 inch	7 ½ inch
200 ft	4 inch	10 inch
300 ft	6 inch	15 inch