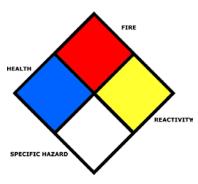
## The NFPA Diamond Hazard Sign

The National Fire Protection Association (NFPA) has developed a hazard warning and rating system to help you to be able to quickly identify and rank hazards of an item you are working with. You've probably seen the colorful labels shaped like a diamond or as a square flag, used to communicate these hazards.

The most common label is the diamond-shaped symbol, made up of four smaller diamonds, one each blue, red, yellow, and white. A number or special symbol is placed on each of the four diamonds.

Many people take one look at the NFPA diamond and are confused what those various colors, numbers, and symbols mean. It's unfortunate, because the system is designed to provide vital safety information at a quick glance without having to refer to a manual or written information sheet. The NFPA system also allows



individuals with reading or other communication difficulties to be able to learn and follow a standardized safety information system.

So what do those colors mean? The blue diamond, appearing on the left side of the label, shows **Health Hazard** information for persons exposed to the material. A number from 0 to 4 is written in the blue diamond. The higher the number the higher the hazard:

0- No hazard.

- 1- Can cause mild irritation.
- 2- Can cause injury. Requires prompt treatment.
- 3- Can cause serious injury. Requires immediate medical treatment.
- 4- Can cause death or major injury.

The red diamond, appearing at the top of the label, displays **Flammability Hazard** information. Again, the numbers 0 to 4 are used to rate the fire hazards with the higher the number, the higher the hazard and risk:

- **0-** Will not burn.
- 1- Ignites after considerable preheating.
- 2- Ignites if moderately heated.
- 3- Can be ignited at all normal temperatures.
- 4- Very flammable gases or very volatile flammable liquids.

The yellow diamond, appearing at the right side of the label, gives the **Reactivity** (or Stability) information. This information often helps you in knowing how to transport and store the material. Like the other colors the hazard is rated on a scale of 0 to 4:

- 0- Normally stable. Not reactive with water.
- 1- Normally stable. Unstable at high temperature 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.

The white diamond, appearing at the bottom of the label, conveys **Special Hazard** information. Special symbols are listed which represent the specific special hazard for that material being posted. There are several symbols used such as the skull and crossbones for poisons, the radiation isotope sign for radiation hazards such as radiological waste, or the warning hand and test tube for acids and corrosives. You also may see a W with a line through it ( $\Psi$ ) which is used to warn that the material is reactive to water and should be kept dry. The symbol **OX** is also used which notes that the material is an oxidizing agent so should be kept clear of flammable materials or open flame.

Some companies also use the white diamond to display what personal protective equipment (PPE) requirements should be used when working the material. You may see a picture of gloves, safety glasses, respirator or other protective clothing in the white diamond as well to show what gear you need prior to beginning work.

Knowing how to properly read the NFPA diamond label provides a quick and convenient way to know basic safety information about a product you involved with. This information is useful to learn the hazards of a particular material and what you should do to use it safely. As always, be sure to follow the warnings on the NFPA label as well and any other labels affixed to a container of material. Many items come with a label already on the container. To determine the NFPA Hazard Ratings for a material which does not have the label affixed, check the Material Safety Data Sheet (MSDS) as the NFPA Hazard Ratings are becoming more and more common as part of the safety information included. It is also a good safety practice to make sure that all containers are labeled with the NFPA label, especially if you use a secondary or smaller container to store or for more convenient use.

Atlantic Safety, a member of the Maine Oxy Group, offers a full line of safety related supplies and services, including warning labels and signs. Talk with your sales representative today about the many different types of safety related solutions available for your needs.



Clark Phinney, Safety Director, STS, WSO-CST

**Disclaimer:** This safety tip sheet is intended to provide basic safety and health recommendations to our customers. While every effort is made to provide timely and accurate advice, it is not a guarantee of total compliance to all applicable regulations. Consult the proper regulatory authorities for any and all specific requirements for your location.

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