

NFPA's Hazard Rating Diamond

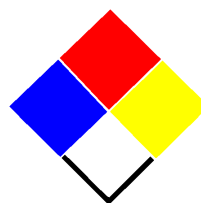
The National Fire Protection Association has developed a rating system to identify and rank hazards of a material. You've probably seen the colorful labels used to communicate these hazards. The label is diamond-shaped, made up of four smaller diamonds, one each blue, red, yellow, and white. A number or special symbol is placed on the four diamonds.

One glance at a NFPA diamond label and you have a wealth of information about the material. The diamond gives useful information if the material is on fire and reactive information. The diamond's hazard information is valid under normal circumstances.



The **blue diamond**, appearing on the left side of the label, conveys 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, as follows:

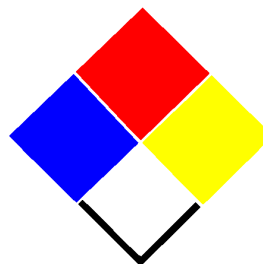
- 0-No hazard.
- 1-Can cause irritation if not treated.
- 2-Can cause injury. Requires prompt treatment.
- 3-Can cause serious injury despite medical treatment.
- 4-Can cause death or major injury despite medical treatment.



The **red diamond**, appearing at the top of the label, conveys **Flammability Hazard** information. Again, the numbers 0 to 4 are used to rate the flammability hazard, as follows:

Flashpoints:

- 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, conveys **Reactivity** (or Stability) information. The numbers 0 to 4 are also used to rank reactivity hazards, as follows:

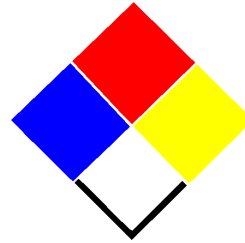
0-Normally stable. Not reactive with water.

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 diamond, appearing at the bottom of the label, conveys **Special Hazard** information. This information is conveyed by use of symbols that represent the special hazard. Some of the common symbols are shown here:

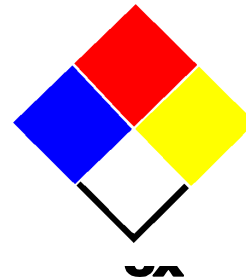
W denotes the material is water reactive

OX denotes an oxidizing agent

COR denotes a corrosive hazard

ALK denotes an Alkali hazard

ACID denotes an Acid hazard



To determine the NFPA Hazard Ratings for a material that does not have the label affixed, check the Material Safety Data Sheet. NFPA Hazard Ratings are commonly displayed there. Guidebooks are also available from safety supply vendors to assist with this task.