



Each section of the diamond is given a Hazard Rating. These ratings range from 0 to 4 according to the material.

Number	Degree of Hazard
0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

The NFPA Diamond is separated into 4 sections. These section are Health, Flammability, Reactivity, and special Information. Each of the four sections is listed below and can bring you to more information to help you assign or understand the hazard ratings.

Health (Blue)
Flammability (Red)
Reactivity (Yellow)
Special Information (white)

Health

4 Extreme	<p>Highly toxic material. Will have one or more of the following characteristics:</p> <ul style="list-style-type: none">• On very short exposure could cause death or major residual injury even though prompt medical treatment is given.• A known or suspected human carcinogen, mutagen, or teratogen.
3 Serious	<p>Toxic material. Will have one or more of the following characteristics:</p> <ul style="list-style-type: none">• May cause serious temporary or residual injury on short term exposure even though prompt medical attention is given.• A known or suspected small animal carcinogen, mutagen, or teratogen.
2 Moderate	<p>Moderately toxic material. Will have one or both of the following characteristics:</p> <ul style="list-style-type: none">• Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical treatment is given.
1 Slight	<p>Slightly toxic material. Will have one or more of the following characteristics:</p> <ul style="list-style-type: none">• May cause irritation but only minor residual injury even without treatment.• Recognized innocuous material when used with responsible care.
0 Minimal	<p>No chemical is without some degree of toxicity.</p>

Flammability

4 Extreme	Extremely flammable. flash point below 73°F (22.8°C).
3 Serious	Flammable. Will have one or more of the following characteristics: <ul style="list-style-type: none">• Vaporizes readily and can be ignited under almost all ambient conditions.• May form explosive mixtures with or burn rapidly in air.• May burn rapidly due to self-contained oxygen.• May ignite spontaneously in air.• Flash point at or above 73°F (22.8°C) but less than 100°F (37.8°C).
2 Moderate	Combustible. Will have one or more of the following characteristics: <ul style="list-style-type: none">• Must be moderately heated or exposed to relatively high temperatures for ignition to occur.• Solids which readily give off flammable vapors.• Flash point at or above 100°F (37.8°C) but less than 200°F (93.4°C).
1 Slight	Slightly combustible. Will have one or more of the following characteristics: <ul style="list-style-type: none">• Must be preheated for ignition to occur.• Will burn in air when exposed at 1500°F (815.5°C) for 5 minutes.• Flash point at or above 200°F (93.4°C)
0 Minimal	Will have one or more of the following characteristics: <ul style="list-style-type: none">• Will not burn.• Will not exhibit a flash point.• Will not burn in air when exposed at 1500°F (815.5°C) for 5 minutes.

Reactivity

4 Extreme	<p>Will have one or more of the following characteristics:</p> <ul style="list-style-type: none">• Can explode or decompose violently at normal temperature and pressure.• Can undergo a violent self-accelerating exothermic reaction with common materials or by itself.• May be sensitive to mechanical or local thermal shock at normal temperature and pressure.
3 Serious	<p>Will have one or more of the following characteristics:</p> <ul style="list-style-type: none">• Can detonate or explode but requires a strong initiating force or confined heating before initiation.• Readily promotes oxidation with combustible materials and may cause fires.• Is sensitive to thermal or mechanical shock at elevated temperatures.• May react explosively with water with out requiring heat or confinement.
2 Moderate	<p>Will have one or more of the following characteristics:</p> <ul style="list-style-type: none">• Normally unstable and readily undergoes violent change but does not detonate.• May undergo chemical change with rapid release of energy at normal temperature and pressure.• May react violently with water.• Forms potentially explosive mixtures with water.
1 Slight	<p>Will have one or more of the following characteristics:</p> <ul style="list-style-type: none">• Normally stable material which can become unstable at high temperature and pressure.
0 Minimal	<p>Normally stable material which is not reactive with water.</p>

Special Information

Ox	This material is considered a very strong oxidizer .
W	Water reactive. Could react violently when exposed to moisture or water. Water will be listed as an incompatible.

Section Definitions:

- **Flash point-** This is the lowest temperature at which a flammable liquid gives off enough vapor to form an ignitable mixture with air.
- **Autoignition Temperature-** This tells you how hot a material must be before it will set itself on fire without a flame or spark.
- **Explosive or Flammable Limits-** Lower (LEL) and upper (UEL) explosion limits are the minimum and maximum concentrations of a flammable gas or vapor (percent by volume in air) between which an explosion can occur if an ignition source is present.
- **Extinguishing Media-** These are the materials which may be used to extinguish a fire.
- **Special Fire-Fighting Precautions-** The proper methods, equipment and other information needed by fire personnel to safely engage a fire.
- **Unusual Fire or Explosion Hazards-** Unusual or unknown conditions or elements that may elevate the hazards in a fire.