Properties of Hazardous Materials [1]

These properties are used to help determine how hazardous a material is and how to handle the material if there is a fire or spill.

Boiling Point...

the temperature at which a liquid boils at normal atmospheric pressure

- The lower the boiling point of a liquid, the greater the fire hazard if it is flammable and the greater the health hazard if the vapors are toxic.

Vapor Pressure...

how easily a substance gives off vapors

- The higher the vapor pressure, the more volatile the substance is and the more vapors are given off.
- Vapor pressure increases with heat. ***Flammable substances with high vapor pressures pose an extreme fire hazard.***

Volatility...

how easily a substance evaporates

- The higher the vapor pressure, the greater the volatility of a substance.

Flash Point...

- At or above this temperature, a flammable substance gives off enough vapor into the air that the mixture of vapor and air will ignite if there is a spark or other source of flame.
  The lower the flash point, the greater the fire hazard.

Auto Ignition Temperature...

- At this temperature, a substance is hot enough to ignite even without being lit–it will spontaneously combust.