

## Section 5 - Firefighting Procedures

**Flash Point (Method Used):** 12.8 °C (CC) (Ethanol)

**NFPA Rating:**

Health: 2

Fire: 3

Reactivity: 0

**Extinguisher Media:** Use dry chemical, CO2 or appropriate foam.

**Flammable Limits in Air % by Volume:** (Ethanol) LEL: 3.3% UEL: 19%

**Autoignition Temperature:** (Ethanol) 363 °C

**Special Firefighting Procedures:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** Vapours may travel back to ignition source. Closed Containers exposed to heat may explode.

Extremely flammable.

## Section 6 - Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

## Section 7 - Special Precautions

**Precautions to Take in Handling or Storing:** Keep container tightly closed in a cool, well-ventilated place. Keep away from oxidizing materials and strong acids.

## Section 8 - Protection Information

**Respiratory Protection (Specify Type):** None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

**Ventilation:**

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

**Protective Gloves:** Natural rubber, Neoprene, PVC or equivalent.

**Eye Protection:** Splash proof chemical safety goggles should be worn.

**Other Protective Clothing or Equipment:** Lab coat, apron, eye wash, safety shower.

## Section 9 - Physical Data

**Molecular Weight:** (Ethanol) 46.07

**Boiling Point:** (Ethanol) 78.5 °C

**Vapor Density(Air=1):** (Ethanol) 1.59

**Percent Volatile by Volume:** 100%

**Solubility in Water:** Soluble

**Melting Point:** (Ethanol) -114.1 °C

**Vapor Pressure:** (Ethanol) 59.3 mmHg at 25°C

**Specific Gravity (H2O=1):** (Ethanol) 0.789 at 20 °C

**Evaporation Rate (BuAc=1):** 3.3

**Appearance and Odor:** Clear, colorless liquid, Alcohol odor.

## Section 10 - Reactivity Data

**Stability:** Stable

**Conditions to Avoid:** Heat and sources of ignition.

**Incompatibility (Materials to Avoid):** Oxidizers,

**Hazardous Decomposition Products:** COx,

**Hazardous Polymerization:** Will not occur