

**US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)**

Components	Type	Value
ACETONE (CAS 67-64-1)	TWA	590 mg/m3 250 ppm
HEPTANE (CAS 142-82-5)	Ceiling	1800 mg/m3 440 ppm
	TWA	350 mg/m3 85 ppm
ISOBUTANE (CAS 75-28-5)	TWA	1900 mg/m3 800 ppm
PROPANE (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

**Biological limit values****ACGIH Biological Exposure Indices (BEI)**

Components	Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	25 mg/l	Acetone	Urine	*

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Provide eyewash station and safety shower. Use adequate ventilation to control airborne concentrations below the exposure limits/guidelines. If user operations generate a vapor, dust and/or mist, use process enclosure, appropriate local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits/guidelines.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Suitable chemical protective gloves should be worn when the potential exists for skin exposure. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Use protective gloves made of: Polyvinyl chloride (PVC). Neoprene.

**Other**

Wear appropriate chemical resistant clothing if applicable.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard 29 CFR 1910.134 and/or Canadian Standard CSA Z94.4.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance****Physical state**

Liquid.

**Form**

Aerosol.

**Color**

Colorless

**Odor**

Not available.

**Odor threshold**

Not available.

**pH**

Not available.

**Melting point/freezing point**

Not available.

**Initial boiling point and boiling range**

Not available.

**Flash point**

-4.0 °F (-20.0 °C)

**Evaporation rate**

Not available.

**Flammability (solid, gas)**

Not applicable.