

# SAFETY DATA SHEET

PROPAN-2-OL

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## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** PROPAN-2-OL

**CAS number:** 67-63-0

**EINECS number:** 200-661-7

**Index number:** 603-117-00-0

**Synonyms:** ISOPROPANOL

ISOPROPYL ALCOHOL

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Ingredient 1:** PROPAN-2-OL 100%

## 3. HAZARDS IDENTIFICATION

**Main hazards:** Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness.

**Other hazards:** In use, may form flammable / explosive vapour-air mixture.

## 4. FIRST AID MEASURES (SYMPTOMS)

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be confusion, aggressive behaviour, slurred speech and staggering walk.

Severe poisoning can cause unconsciousness and severe and persistent nausea and vomiting. Convulsions may occur.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Absorption through the lungs can occur causing symptoms similar to those of ingestion.

## 4. FIRST AID MEASURES (ACTION)

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:** Do not induce vomiting. If conscious, give 1 pint of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

[cont...]

## PROPAN-2-OL

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Carbon dioxide. Alcohol resistant foam.

**Exposure hazards:** Highly flammable. Vapour may travel considerable distance to source of ignition and flash back. Forms explosive air-vapour mixture. In combustion emits toxic fumes of carbon dioxide and carbon monoxide.

**Protection of fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Eliminate all sources of ignition.

**Environmental precautions:** Contain the spillage using bunding.

**Clean-up procedures:** Mix with sand or vermiculite. If inside, transfer outside of building in suitable containers. For small spills, absorb on to paper and allow to evaporate in a fume cupboard. Wash the spillage site with large amounts of water.

**7. HANDLING AND STORAGE**

**Handling requirements:** Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance. Smoking is forbidden.

**Storage conditions:** Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed. Ensure lighting and electrical equipment are not a source of ignition.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves.

**Eye protection:** Safety goggles. Ensure eye bath is to hand.

**Skin protection:** Protective clothing with elasticated cuffs and closed neck. Boots made of PVC. Ensure safety shower is to hand.

**TWA (8 hr exposure limit):** 999 mg/m<sup>3</sup>

**STEL (15 min exposure limit):** 1250 mg/m<sup>3</sup>

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:** Liquid

**Colour:** Colourless

**Odour:** Pleasant

**Viscosity:** Non-viscous

**Oxidising:** Non-oxidising (by EC criteria)

## PROPAN-2-OL

**Evaporation rate:** Moderate

**Solubility in water:** Soluble

**Also soluble in:** Most organic solvents.

**Boiling point/range°C:** 83

**Flammability limits %: lower:** 2

**upper:** 12

**Flash point°C:** 12

**Autoflammability°C:** 399

**Relative density:** 0.8

**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions.

**Conditions to avoid:** Sources of ignition. Flames.

**Materials to avoid:** Oxidising agents.

**Haz. decomp. products:** In combustion emits toxic fumes of carbon dioxide and carbon monoxide.

**11. TOXICOLOGICAL INFORMATION**

**Toxicity:** PROPAN-2-OL

IVN RAT LD50 1088mg/kg

ORL MUS LD50 3600mg/kg

ORL RAT LD50 5045mg/kg

SCU MUS LDLO 6gm/kg

**12. ECOLOGICAL INFORMATION**

**Mobility:** Soluble in water.

**Persistence and degradability:** Biodegradable.

**Bioaccumulative potential:** No bioaccumulation potential.

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal:** Mix or dissolve with a combustible material and burn in a chemical incinerator equipped with afterburners and scrubbers.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**14. TRANSPORT INFORMATION****ADR / RID**

**UN no:** 1219

**ADR Class:** 3

**Hazard ID no:** 33

**Labelling:** 3

**IMDG / IMO**

**UN no:** 1219

**Class:** 3.2

**Packing group:** II

## PROPAN-2-OL

**EmS:** 3-06

**Marine pollutant:** NO

**Labelling:** 3 FLAMMABLE LIQUID

**IATA / ICAO**

**UN no:** 1219

**Class:** 3

**Packing group:** II

**Packing instructions:** 307

**Quantity:** 60L

**Labelling:** 3 FLAMMABLE LIQUID

**15. REGULATORY INFORMATION**

**Hazard symbols:** Highly flammable.

Irritant.



**Risk phrases:** R11: Highly flammable.

R36: Irritating to eyes.

R67: Vapours may cause drowsiness and dizziness.

**Safety phrases:** S2: Keep out of the reach of children.

S7: Keep container tightly closed.

S16: Keep away from sources of ignition - No smoking.

S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**16. ADDITIONAL INFORMATION**

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.