

### Version 1.0

**Issue date: 12/07/2019**

***Safety Data Sheet***

***According to Regulation (EC) No 1907/2006***

propan-2-ol

### Revision date: 12/07/2019 SDS Record Number: CSSS-TCO-010-116800

* 1. **Product identifier:**



**Section 1 Identification of the substance/mixture and of the company/undertaking**

Identification on the label/Trade name: propan-2-ol

Additional identification: Isopropanol

Identification of the product: CAS#67-63-0 EC#200-661-7

Index Number: 603-117-00-0

## Relevant identified uses of the substance and uses advised against:

### Identified uses:

Not available.

### Uses advised against:

Not available.

## Details of the supplier of the safety data sheet:

Supplier(Manufacture): ALIGN CHEMICAL LTD

Address: 29 Milton Lawns, Amersham, Bucks, HP6 6BJ

Contact person(E-mail): [barry.langdon@alignchemical.com](mailto:barry.langdon@alignchemical.com)

Telephone: +44 1494 728458

Fax: +44 1494 728458

## Emergency telephone Number:

+44 7787 587489 (Only available during office hours (8:30a.m.-17:30p.m.)

Available outside office hours? YES  NO



X



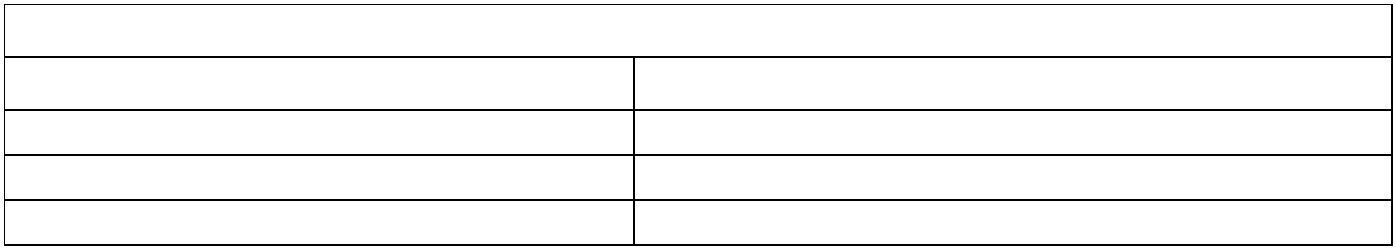
**Section 2 Hazards Identification**

**2.1 Classification of the substance/mixture:**

### 2.1.1 Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008:

*For full text of H- phrases: see section 2.2.*



**REGULATION (EC) No 1272/2008**

Hazard classes/Hazard categorie Flam. Liq. 2

Eye Irrit. 2

STOT SE 3

Hazard statement

H225

H319 H336

### label elements:

**Hazard Pictograms:**

**Signal Word(S):** Danger

**Hazard Statement:** H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

**Precautionary statement:** P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment. P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell. P337 + P313: If eye irritation persists: Get medical advice/attention.

P370 + P378: In case of fire: Use Water spray, alcohol-resistant foam, carbon dioxide (CO2), dry powder for extinction.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed. P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

P501: Dispose of contents/container in according with local regulation.

## Other hazards:

Not applicable.

**Substance/Mixture:** Substance



**Section 3 Composition/information on ingredients**

### Ingredient(s):



**Chemical Name**

**Registration No.**

**CAS No.**

**EC No.**

**Concentration**

propan-2-ol

01-2119457558-25-0150 67-63-0

200-661-7

99.9%

water

-

7732-18-5

231-791-2

0.1%



**Section 4 First aid measures**

* 1. **Description of first aid measures:**

In all cases of doubt, or when symptoms persist, seek medical attention.

### In case of inhalation:

Move to fresh air.

### In case of skin contact:

Wash off with plenty of water.

### In case of eyes contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### In case of ingestion:

Drink plenty of water. Do NOT induce vomiting. Obtain medical attention.

## Most important symptoms and effects, both acute and delayed:

Causes serious eye irritation. May cause drowsiness or dizziness.

## Indication of any immediate medical attention and special treatment needed:

Not available.



**Section 5 Fire-Fighting measures**

## Extinguishing media:

**Suitable extinguishing media:** Water spray, alcohol-resistant foam, carbon dioxide (CO2), dry powder.

**Unsuitable extinguishing media:** High volume water.

## Special hazards arising from the

**substance or mixture**

Highly flammable liquid and vapour. In case of fire, the following can be released:

Carbon oxides.

* 1. **Special fire fighting methods and** Firefighters must wear fire resistant protective equipment. Wear approved respirator

**special protective actions for** and protective gloves. Use water spray to cool unopened containers.

# Section 6 Accidental release measures



**fire-fighters:**

## Personal precautions, protective equipment and emergency procedures:

* + 1. **For non-emergency personnel:** Ensure adequate ventilation. Keep away from sources of ignition - No smoking.
    2. **For emergency responders:** Wear an appropriate NIOSH/MSHA approved respirator if vapours is generated.
  1. **Environmental Precautions:** Do not flush into surface water or sanitary sewer system. Do not allow material to

contaminate ground water system.

* 1. **Methods for Containment and Cleaning** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal

**up:** binder, sawdust).

* 1. **Reference to other sections:** See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.

* 1. **Additional information:** Not applicable.



**Section 7 Handling and storage**

## Precautions for safe handling:

* + 1. **Protective measures:** Ensure adequate ventilation. Vapours are heavier than air and may spread along

floors. Keep away from sources of ignition - No smoking. Vapours may form

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explosive mixtures with air. Do not allow to enter drains (danger of explosion). Take precautionary measures against static discharges.

* + 1. **Advice on general occupational** Do not eat, drink and smoke in work areas. Wash hands after use. Remove

**hygiene:** contaminated clothing and protective equipment before entering eating areas.

* 1. **Conditions for safe storage, including** Keep container tightly closed. Store between 5 and 25 °C in a dry, well ventilated

**any incompatibilities:** place away from sources of heat, ignition and direct sunlight.

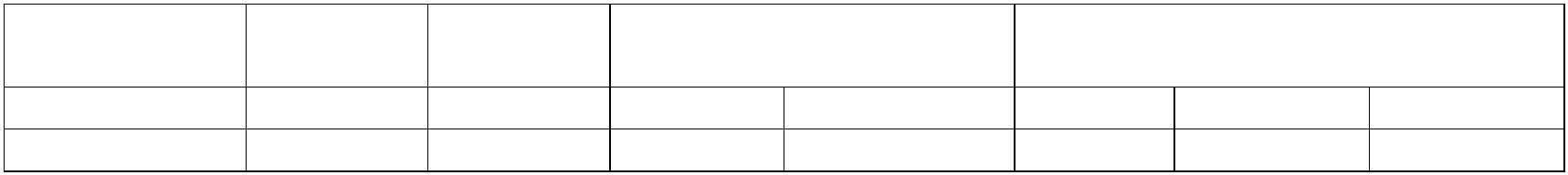
* 1. **Specific end use(s):** Not applicable.



**Section 8 Exposure Controls/Personal Protection**

## Control parameters:

### Occupational exposure limits:



Substance

Occupational Exposure Limit

Value (8-hour reference period)

Occupational Exposure Limit Value

(15-minute reference period

EINECS No. CAS No. ppm mg/ m3 ppm mg/ m3 Notes

Isopropyl alcohol 200-661-7 67-63-0 200 - 400 - Sk

* + 1. **Additional exposure limits under the** Not available.

### conditions of use:

* + 1. **DNEL/DMEL and PNEC-Values:** Not available.

## Exposure controls:

* + 1. **Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.

* + 1. **Individual protection measures, such as personal protective equipment: Eye/face protection:** Tightly fitting safety goggles.

**Hand protection:** Gloves suitable for permanent contact: Material: Nitrile rubber/nitrile latex,

butyl-rubber. Break through time: >= 480 min; Material thickness: 0.35 mm.

Gloves suitable for splash protection: Material: Polychloroprene. Break through time: >= 240 min; Material thickness: 0.5 mm.

**Body protection:** Wear suitable protective clothing to prevent skin exposure.

**Respiratory protection:** No personal respiratory protective equipment normally required. In inadequately

ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or ABEK-P2), in compliance with EN 141.

**Thermal hazards:** Wear suitable protective clothing to prevent heat.

* + 1. **Environmental exposure controls:** Avoid discharge into the environment. According to local regulations, Federal and

official regulations.

## 9.1 Information on basic physical and chemical properties:



**Section 9 Physical and chemical properties**

**Appearance:** Liquid

**Colour:** Colorless

**Odour:** Not available

**Odour threshold:** Not available

**pH:** Not available

### Melting point/range (°C): -88.5

**Boiling point/range (°C):** 80.3

**Flash point (°C):** 12

**Evaporation rate:** Not available

**Flammability limit - lower (%):** Not available

**Flammability (solid, gas):** Not available

### Ignition temperature (°C): 399

**Upper/lower flammability/explosive limits:** 12.7/2.0

**Vapour pressure (20°C):** 4.40kPa

### Vapour density: 2.07

**Relative Density:** 0.79

**Bulk density (kg/m3):** Not available

**Water solubility (g/l):** Soluble in water

### n-Octanol/Water (log Po/w): <0.28

**Auto-ignition temperature:** Not available

**Decomposition temperature:** Not available

**Viscosity, dynamic (mPa.s):** Not available

**Explosive properties:** Not available

**Oxidising properties:** Not available

**Molecular Formula:** C3H8O

**Molecular Weight:** 60.10

## 9.2. Other information:

**Fat solubility(solvent– oil to be specified)** Soluble in alcohol, ether, benzene, chloroform and most organic solvents.

### etc:

**Surface tension:** Not available

**Dissociation constant in water( pKa):** Not available

**Oxidation-reduction Potential:** Not available

**Specific gravity:** Not available

# Section 10 Stability and reactivity

* 1. **Reactivity:** The substance is stable under normal storage and handling conditions.
  2. **Chemical stability:** Stable at room temperature in closed containers under normal storage and handling

conditions.

* 1. **Possibility of hazardous reactions:** Vapours may form explosive mixture with air.
  2. **Conditions to avoid:** Incompatible materials.
  3. **Incompatible materials:** Strong oxidizing agents.
  4. **Hazardous decomposition products:** Carbon oxides.

## Toxicokinetics, metabolism and distribution:



**Section 11 Toxicological information**

**Non-human toxikological data:** Not available

## Information on toxicological effects:

### Acute toxicity:

**LD50(Oral, Rat):** 5.84 g/kg

**LD50(Dermal, Rabbit):** 16.4 mL/kg bw

**LC50(Inhalation, Rat):** > 10000 ppm 6h

**Skin corrosion/Irritation:** Not classified

**Serious eye damage/irritation:** Causes serious eye irritation.

**Respiratory or skin sensitization:** Not classified

**Germ cell mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive toxicity:** Not classified

**STOT- single exposure:** May cause drowsiness or dizziness.

**STOT-repeated exposure:** Not classified

**Aspiration hazard:** Not classified

## Toxicity:



**Section 12 Ecological information**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Acute** | **toxicity** | **Time** | **Species** | **Method** | **Evaluation** | **Remarks** |
| LC50 | 10000 mg/L | 96h | Fish | OECD 203 | N/A | N/A |
| LC50 | > 10000 mg/L | 24h | Daphnia | OECD 202 | N/A | N/A |
| EC50 | N/A | 72h | Algae | OECD 201 | N/A | N/A |

**Persistence and degradability:** Readily biodegradable.

**Bioaccumulative potential:** Not available.

**Mobility in soil:** Soluble in water.

**Results of PBT&vPvB assessment:** The substance is not PBT / vPvB.

**Other adverse effects:** Not available.

* 1. **Waste treatment methods:** Due to the high risk of contamination recycling/recovery is not recommended.

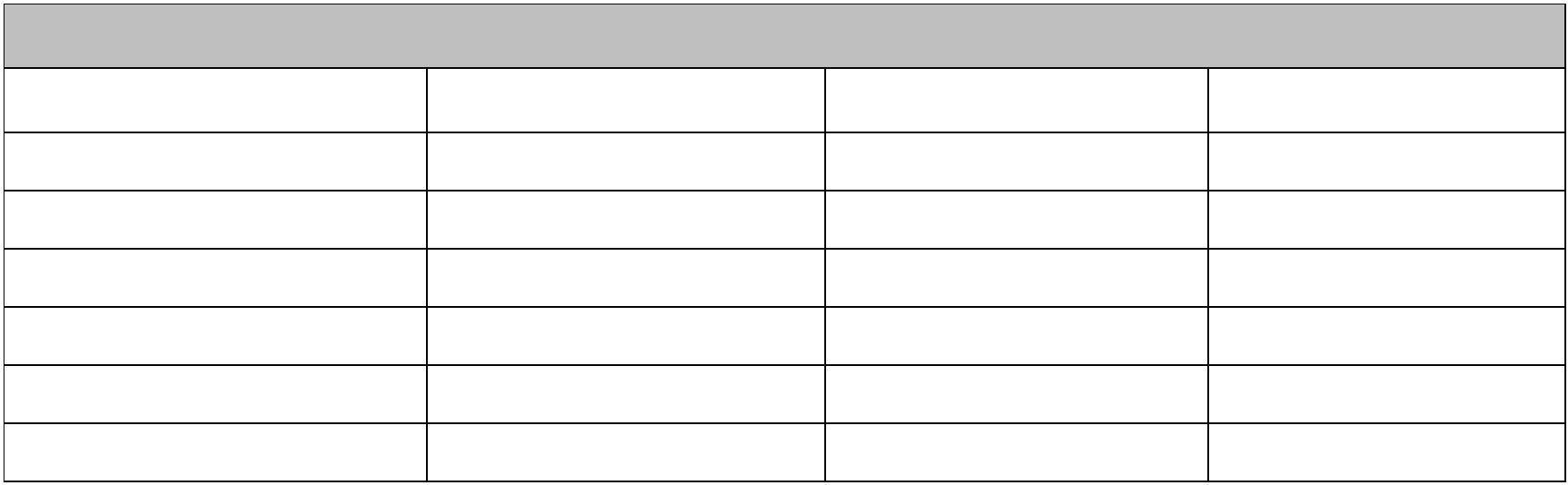


**Section 13 Disposal considerations**

Waste disposal in accordance with regulations (most probably controlled incineration).

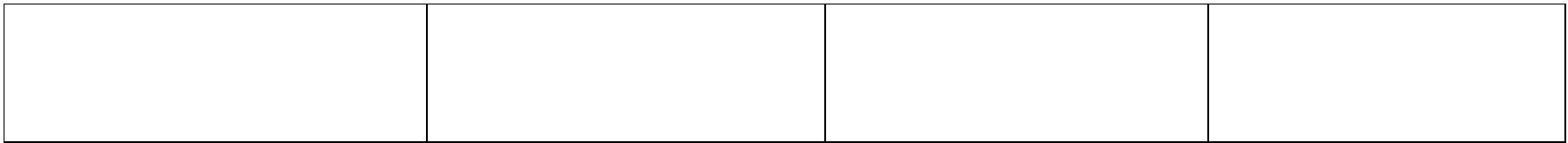
* 1. **Product / Packaging disposal:** According to local regulations. Emptied container might retain product residues.

Follow all warnings even after the container is emptied.



**Section 14 Transport information**

|  |  |  |  |
| --- | --- | --- | --- |
| **UN-Number**  **UN Proper shipping name** | **Land transport(ADR/RID)**  1219  ISOPROPYL ALCOHOL | **Sea transport (IMDG)**  1219  ISOPROPYL ALCOHOL | **Air transport (ICAO/IATA)**  1219  ISOPROPYL ALCOHOL |
| **Transport hazard Class** | 3 | 3 | 3 |
| **Packaging group** | II | II | II |
| **Environmental hazards** | No | No | No |
| **Special precautions for user**  Product name: propan-2-ol | See section 2.2 | See section 2.2 | See section 2.2  SDS EU |



**Transport in bulk according to**

**Annex II of MARPOL 73/78 and the IBC Code**

IBC02

IBC02

IBC02



**Section 15 Regulation information**

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

**Relevant information regarding authorization:** Not applicable.

**Relevant information regarding restriction:** Not applicable.

**Other EU regulations:** Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

**Other National regulations:** Not applicable

**Chemical Safety Assessment has been carried out?** YES  NO



X



**Section 16 Other information**

## Indication of changes:

Version 1.0 Amended by EU No 2015/830

## Training instructions:

Not applicable.

## Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

## Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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