

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name**

Isopropylalcohol

**Product no.**

-

**REACH registration number**

-

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses of the substance or mixture**

NA

**Uses advised against**

-

The full text of any mentioned and identified use categories are given in section 16

### 1.3. Details of the supplier of the safety data sheet

**Company and address**

Pureno A/S  
Rønnevangs Allé 8  
3400 Hillerød  
Denmark  
Tlf.: +45 70 260 267

**Contact person**

Kenneth Christensen

**E-mail**

mail@pureno.dk

**SDS date**

2019-05-09

**SDS Version**

1.0

### 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Flam. Liq. 2; H225

Eye Irrit. 2; H319

STOT SE 3; H336

See full text of H-phrases in section 2.2.

### 2.2. Label elements

**Hazard pictogram(s)****Signal word**

Danger

**Hazard statement(s)**

Highly flammable liquid and vapour. (H225)

Causes serious eye irritation. (H319)

May cause drowsiness or dizziness. (H336)

**Safety statement(s)**

General	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
Prevention	Wear eye protection. (P280).
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
Storage	Store in a well-ventilated place. Keep cool. (P403+P235).
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

**Identity of the substances primarily responsible for the major health hazards**

propan-2-ol. Index-no.: 603-117-00-0

**2.3. Other hazards**

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

**Additional labelling**

Not applicable

**Additional warnings**

Tactile warning.

**VOC**

59,9 % EU/1999/13

**SECTION 3: Composition/information on ingredients****3.1/3.2. Substances/Mixtures**

NAME:	propan-2-ol
IDENTIFICATION NOS.:	CAS-no: 67-63-0 EC-no: 200-661-7 Index-no: 603-117-00-0
CONTENT:	95-100%
CLP CLASSIFICATION:	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3 H225, H319, H336
NOTE:	S

(\*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.  
S = Organic solvent

**Other information**

$$\text{Eye Cat. 2 Sum} = \text{Sum}(\text{Ci/S(G)CLi}) = 8 - 12$$
**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

**Inhalation**

Bring the person into fresh air and stay with him/her.

**Skin contact**

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

**Eye contact**

Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing.

**Ingestion**

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

**Burns**

Rinse with water until the pain stops then continue to rinse for a further 30 minutes.

#### 4.2. Most important symptoms and effects, both acute and delayed

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### 4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get immediate medical advice/attention.

##### Information to medics

Bring this safety data sheet.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from spilled material. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

#### 6.2. Environmental precautions

No specific requirements.

#### 6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Avoid static electricity. Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection.

#### 7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

##### Storage temperature

No data available.

#### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****OEL**

propan-2-ol

Long-term exposure limit (8-hour TWA reference period): 400 ppm | 999 mg/m<sup>3</sup>Short-term exposure limit (15-minute reference period): 500 ppm | 1250 mg/m<sup>3</sup>**DNEL / PNEC**

DNEL (propan-2-ol): 888 mg/kg bw/dag

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (propan-2-ol): 500 mg7m3

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (propan-2-ol): 319mg/kg bw/dag

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - General population

DNEL (propan-2-ol): 89mg/m3

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - General population

DNEL (propan-2-ol): 26mg/kg bw/dag

Exposure: Oral

Duration of Exposure: Long term – Systemic effects - General population

PNEC (propan-2-ol): 552mg/kg

Exposure: Marine water sediment

PNEC (propan-2-ol): 140,9 mg/l

Exposure: Freshwater

PNEC (propan-2-ol): 28 mg/kg

Exposure: Soil

PNEC (propan-2-ol): 140,9 mg/l

Exposure: Marine water

PNEC (propan-2-ol): 140,9 mg/l

Exposure: Intermittent release

PNEC (propan-2-ol): 251 mg/l

Exposure: Sewage Treatment Plant

PNEC (propan-2-ol): 552 mg/kg

Exposure: Freshwater sediment

**8.2. Exposure controls**

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

**General recommendations**

Observe general occupational hygiene standards.

**Exposure scenarios**

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

**Exposure limits**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

**Appropriate technical measures**

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

**Hygiene measures**

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

**Measures to avoid environmental exposure**

No specific requirements.

**Individual protection measures, such as personal protective equipment**

**Generally**

Use only CE marked protective equipment.

**Respiratory Equipment**

If ventilation at the work place is insufficient, use a half- or full mask with an appropriate filter or an air-supplied breathing apparatus depending on the specific work situation and how long you will be using the product.

**Skin protection**

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

**Hand protection**

Recommended: Nitrile rubber

**Eye protection**

Wear safety glasses with side shields.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Form	Liquid
Colour	Clear
Odour	Characteristic
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm <sup>3</sup> )	0,79

**Phase changes**

Melting point (°C)	-88
Boiling point (°C)	82
Vapour pressure (20°C)	6,02 kPa
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.

**Data on fire and explosion hazards**

Flash point (°C)	12
Ignition (°C)	No data available.
Auto flammability (°C)	425
Explosion limits (% v/v)	2 - 12 v/v%
Explosive properties	No data available.

**Solubility**

Solubility in water	Soluble
n-octanol/water coefficient	0,05

**9.2. Other information**

Solubility in fat (g/L)	No data available.
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**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available

**10.2. Chemical stability**

The product is stable under the conditions, noted in the section "Handling and storage".

**10.3. Possibility of hazardous reactions**

Nothing special

**10.4. Conditions to avoid**

Avoid static electricity. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

**10.5. Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**10.6. Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Substance: propan-2-ol  
Species: Rabbit  
Test: LD50  
Route of exposure: Dermal  
Result: >2000 mg/kg

Substance: propan-2-ol  
Species: Rat  
Test: LD50  
Route of exposure: Oral  
Result: 5840 mg/kg

Substance: propan-2-ol  
Species: Rat  
Test: LC50  
Route of exposure: Inhalation  
Result: 47,5mg/l 8 h

Substance: propan-2-ol  
Species: Rat  
Test: LC50  
Route of exposure: Inhalation  
Result: 66,1mg/l 4 h

#### Skin corrosion/irritation

No data available.

#### Serious eye damage/irritation

Causes serious eye irritation.

#### Respiratory or skin sensitisation

No data available.

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

No data available.

#### Reproductive toxicity

No data available.

#### STOT-single exposure

May cause drowsiness or dizziness.

#### STOT-repeated exposure

No data available.

#### Aspiration hazard

No data available.

#### Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

## SECTION 12: Ecological information

### 12.1. Toxicity

Substance: propan-2-ol  
Species: Algae  
Test: NOEC  
Duration: 8d  
Result: >1800 mg/l

Substance: propan-2-ol

Species: Fish  
 Test: LC50  
 Duration: 96 h  
 Result: 8970-9280 mg/l

Substance: propan-2-ol  
 Species: Daphnia  
 Test: EC50  
 Duration: 24 h  
 Result: 9714 mg/l

Substance: propan-2-ol  
 Species: Crustacean  
 Test: EC10  
 Duration: 18 h  
 Result: 5175 mg/l

Substance: propan-2-ol  
 Species: Crustacean  
 Test: EC50  
 Duration:  
 Result: >1000mg/l

**12.2. Persistence and degradability**

Substance	Biodegradability	Test	Result
propan-2-ol	Yes	Modified OECD Screening Test	95%

**12.3. Bioaccumulative potential**

Substance	Potential bioaccumulation	LogPow	BCF
propan-2-ol	No	No data available	No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

This substance is not considered to meet the criteria classifying it as PBT and/or vPvB.

**12.6. Other adverse effects**

Nothing special

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Product is covered by the regulations on hazardous waste.

**Waste**

EWC code  
 07 01 04\* other organic solvents, washing liquids and mother liquors

**Specific labelling**

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**Contaminated packing**

Contaminated packaging must be disposed of similarly to the product.

**SECTION 14: Transport information**

**14.1 – 14.4**

This product is within scope of the regulations of transport of dangerous goods.

**ADR/RID**

14.1. UN number	1219
14.2. UN proper shipping name	-
14.3. Transport hazard class(es)	3
14.4. Packing group	II
Notes	-
Tunnel restriction code	-

**IMDG**

UN-no.	1219
Proper Shipping Name	ISOPROPYL ALCOHOL
Class	3
PG*	II
EmS	F-E, S-D

<b>MP**</b>	-
<b>Hazardous constituent</b>	-
<b>IATA/ICAO</b>	
<b>UN-no.</b>	1219
<b>Proper Shipping Name</b>	ISOPROPYL ALCOHOL
<b>Class</b>	3
<b>PG*</b>	II

**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

-

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available

(\*) Packing group

(\*\*) Marine pollutant

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Restrictions for application**

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

**Demands for specific education**

-

**Additional information**

Tactile warning.

**Seveso**

Seveso III Part 1: P5c

**Sources**

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).

EC regulation 1907/2006 (REACH).

The Control of Major Accident Hazards (COMAH) Regulations 2015.

**15.2. Chemical safety assessment**

No

**SECTION 16: Other information****Full text of H-phrases as mentioned in section 3**

H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

**The full text of identified uses as mentioned in section 1**

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**Additional label elements**

Not applicable

**Other**

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data.

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)



It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

**The safety data sheet is validated by**

KAO

**Date of last essential change  
(First cipher in SDS version)**

-

**Date of last minor change  
(Last cipher in SDS version)**

-