

SAFETY DATA SHEET

Isopropylalcohol

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

1.1. Product identifier

Trade name

Isopropylalcohol

Other means of identification

Index No.: 603-117-00-0

EC No.: 200-661-7

CAS No.: 67-63-0

Unique formula identifier (UFI)

36QH-UUW6-7KD5-4ANN

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

Relevant identified uses of the substance or mixture

Cleaning product

Use descriptors (REACH)

Sector of use	Description
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
LCS "C"	Consumer uses: Private households (= general public = consumers)
Product categories	Description
PC35	Washing and Cleaning Products (including solvent based products)
Process Categories	Description
PROC19	Hand-mixing with intimate contact and only PPE available
Environmental release categories	Description
ERC8a	Wide dispersive indoor use of processing aids in open systems

Uses advised against

No special

1.3. Details of the supplier of the safety data sheet

Company and address

Pureno A/S

Rønnevangs Alle 8

3400 Hillerød

Danmark

+45 70 260 267

Contact person

Kenneth Christensen

E-mail

kc@pureno.dk

SDS date

2021-05-27

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. 1; H224, Extremely flammable liquid and vapour.

Flam. Liq. 2; H225, Highly flammable liquid and vapour.

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H336, May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Extremely flammable liquid and vapour.

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Safety statement(s)

General

P101, If medical advice is needed, have product container or label at hand.

P102, Keep out of reach of children.

Prevention

P210, Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233, Keep container tightly closed.

Response

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

P370+P378, In case of fire: Use water mist / carbon dioxide / alcohol-resistant foam to extinguish.

Storage

P403+P235, Store in a well-ventilated place. Keep cool.

Disposal

P501, Dispose of contents/container to an approved waste disposal plant.

Hazardous substances

Propan-2-ol

2.3. Other hazards

Additional labelling

EUH019, May form explosive peroxides.

Additional warnings

The material contains substances included in the DEMA's list of peroxide forming substances in Group B. Group B includes substances, which can form hazardous levels of peroxides e.g. during distillation, evaporation or extraction.

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Product/substance	Identifiers	% w/w	Classification	Note
Propan-2-ol	CAS No.: 67-63-0 EC No.: 200-661-7 REACH: Index No.: 603-117-00-0	95-100%	Flam. Liq. 2, H225 STOT SE 3, H336 Eye Irrit. 2, H319	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

No special

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. 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

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

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 pain stops then continue to rinse for 30 minutes.

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

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.

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.

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 or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. 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.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂).

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

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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 13 on "Disposal considerations" in regard of handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof [electrical / lighting / ventilating]equipment.

Use non-sparking tools.

Take action to prevent static discharges.

The product should be tested for peroxides before distillation or evaporation and tested for peroxide formation or discarded after 1 year.

Peroxide formation may be present anywhere in the container, including the sides, bottom, exterior and threaded cap. Peroxide formation in ppm concentrations may not be visually observable and must be identified through the use of appropriate testing procedures. If any of the following conditions exist, the material may be explosively unstable and will require stabilization prior to use:

1. Material appears to be degraded and or contaminated.
2. Material appears to be discolored.
3. Deterioration or distortion of storage container.
4. Thermal shock (sunlight).
5. Age of material exceeds recommended storage time.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

> 0°C

Incompatible materials

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

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

—
Propan-2-ol

Long term exposure limit (8 hours) (ppm): 400

Long term exposure limit (8 hours) (mg/m³): 999

Short term exposure limit (15 minutes) (ppm): 500

Short term exposure limit (15 minutes) (mg/m³): 1250

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020)

DNEL

Product/substance	Propan-2-ol
DNEL	888 mg/kg bw/dag
Route of exposure	Dermal
Duration	Long term – Systemic effects - Workers
Product/substance	Propan-2-ol
DNEL	500 mg7m3
Route of exposure	Inhalation
Duration	Long term – Systemic effects - Workers
Product/substance	Propan-2-ol
DNEL	319mg/kg bw/dag
Route of exposure	Dermal
Duration	Long term – Systemic effects - General population
Product/substance	Propan-2-ol
DNEL	89mg/m3
Route of exposure	Inhalation
Duration	Long term – Systemic effects - General population
Product/substance	Propan-2-ol
DNEL	26mg/kg bw/dag
Route of exposure	Oral
Duration	Long term – Systemic effects - General population

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

PNEC

Product/substance	Propan-2-ol
PNEC	552mg/kg
Route of exposure	Marine water sediment
Duration of Exposure	

Product/substance	Propan-2-ol
PNEC	140,9 mg/l
Route of exposure	Freshwater
Duration of Exposure	

Product/substance	Propan-2-ol
PNEC	28 mg/kg
Route of exposure	Soil
Duration of Exposure	

Product/substance	Propan-2-ol
PNEC	140,9 mg/l
Route of exposure	Marine water
Duration of Exposure	

Product/substance	Propan-2-ol
PNEC	140,9 mg/l
Route of exposure	Intermittent release
Duration of Exposure	

Product/substance	Propan-2-ol
PNEC	251 mg/l
Route of exposure	Sewage treatment plant
Duration of Exposure	

Product/substance	Propan-2-ol
PNEC	552 mg/kg
Route of exposure	Freshwater sediment
Duration of Exposure	

8.2. Exposure controls

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

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

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 a local 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

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

No specific requirements

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Work situation	Type	Class	Colour	Standards
When developing vapour, use respiratory protection with approved filter	Normally, personal respiratory equipment is not necessary			

Skin protection

Work situation	Recommended	Type/Category	Standards
	Dedicated work clothing should be worn	-	-



Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
	Nitrile	0.3	> 60	EN374-2, EN374-3, EN388



Eye protection

Work situation	Type	Standards
	Safety glasses	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form

Liquid

Colour

Colourless

Odour

Testing not relevant or not possible due to nature of the product.

Odour threshold (ppm)

Testing not relevant or not possible due to nature of the product.

pH

Testing not relevant or not possible due to nature of the product.

Density (g/cm³)

0.79

Viscosity

Testing not relevant or not possible due to nature of the product.

Phase changes

Melting point (°C)

Testing not relevant or not possible due to nature of the product.

Boiling point (°C)

82-83 °C

Vapour pressure

6.02 Pa

Vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

Evaporation rate (n-butylacetate = 100)

Data on fire and explosion hazards

Flash point (°C)

12.00 °C

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

Explosion limits (% v/v)

Testing not relevant or not possible due to nature of the product.

Explosive properties

Testing not relevant or not possible due to nature of the product.

Oxidizing properties

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Testing not relevant or not possible due to nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

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.

Risk of formation of explosive peroxides when distilled, evaporated or otherwise concentrated.

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

Product/substance	Propan-2-ol
Test method	
Species	Rabbit
Route of exposure	Dermal

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

Test	LD50
Result	>2000 mg/kg ·
Other information	

Product/substance	Propan-2-ol
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	5840 mg/kg ·
Other information	

Product/substance	Propan-2-ol
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	66,1 mg/l 4 h ·
Other information	

Product/substance	Propan-2-ol
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	47,5 mg/l 8 h ·
Other information	

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

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.

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

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

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.

Other information

Propan-2-ol has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Propan-2-ol
Test method	
Species	Algae
Compartment	
Duration	8 days
Test	NOEC
Result	>1800 mg/l ·
Other information	

Product/substance	Propan-2-ol
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	8970-9280 mg/l ·
Other information	

Product/substance	Propan-2-ol
Test method	
Species	Daphnia
Compartment	
Duration	24 hours
Test	EC50
Result	9714 mg/l ·
Other information	

Product/substance	Propan-2-ol
Test method	
Species	Crustacean
Compartment	
Duration	18 hours
Test	EC10
Result	5175 mg/l ·
Other information	

Product/substance	Propan-2-ol
Test method	
Species	Crustacean
Compartment	
Duration	No data available.
Test	EC50
Result	>1000mg/l ·

Other information

12.2. Persistence and degradability

Product/substance	Propan-2-ol
Biodegradable	Yes
Test method	OECD 301 E
Result	95%

12.3. Bioaccumulative potential

Product/substance	Propan-2-ol
Test method	
Potential bioaccumulation	No
LogPow	No data available
BCF	No data available
Other information	

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

No special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

To the extent the material has not been subject to regular tests of peroxide formation the waste shall be treated as explosive waste.

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

HP 15 - May form explosive peroxides

Avoid discharge to lakes, streams, sewers, etc.

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

07 01 04* Other organic solvents, washing liquids and mother liquors

Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product 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

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

UN- or ID number	UN proper shipping name	Labels	PG	Tunnel restriction code
1219	ISOPROPANOL (ISOPROPYL ALCOHOL)	3	II	2 (D/E)

IMDG

UN- or ID number	UN proper shipping name	Labels	PG	EmS
1219	ISOPROPANOL (ISOPROPYL ALCOHOL)	3	II	F-E, S-D

"MARINE POLLUTANT"

No

IATA

UN- or ID number	UN proper shipping name	Labels	PG
1219	ISOPROPANOL (ISOPROPYL ALCOHOL)	3	II

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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

No data available

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.

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

No specific requirements

SEVESO - Categories / dangerous substances

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

P5a - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 10 tonnes / (upper-tier): 50 tonnes

Additional information

Not applicable

Sources

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

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).

Regulation (EC) 1907/2006 (REACH).

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.

H336, May cause drowsiness or dizziness.

H319, Causes serious eye irritation.

The full text of identified uses as mentioned in section 1

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

LCS "C" = Consumer uses: Private households (= general public = consumers)

PROC19 = Hand-mixing with intimate contact and only PPE available

PC35 = Washing and Cleaning Products (including solvent based products)

ERC8a = Wide dispersive indoor use of processing aids in open systems

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit.

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVCB = Complex hydrocarbon substance

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

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

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

The safety data sheet is validated by

LT

Other

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

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

necessarily correct for use with other chemicals/products.

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.

Country-language: GB-en