

SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Isopropanol/Isopropanol/Isopropyl alcohol

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Substance name : Isopropanol/Isopropanol/Isopropyl alcohol

EC-No. : 200-661-7

CAS-No. : 67-63-0

Formula : C₃H₈O

Synonyms : 2-Propanol, Isopropanol

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

Main use category : Professional use

Use of the substance/mixture : Electronics chemical

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Sunchem AB

Box 69

S-433 21 Partille Sweden

T +46 31 447310 - F +46 31 449581

[E-mail: d.s@sunco.se](mailto:d.s@sunco.se)

Manufacturer

Sunchem AB

Box 69

S-433 21 Partille Sweden

T +46 31 447310 - F +46 31 449581

[E-mail: d.s@sunco.se](mailto:d.s@sunco.se)

Contact person : Dick Sundström

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225

Eye Irrit. 2 H319

STOT SE 3 H336

Full text of H statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]



Hazard pictograms (CLP) :
 Signal word (CLP) : GHS02 GHS07
 Hazard statements (CLP) : Danger
 : H225 - Highly flammable liquid and vapour.
 H319 - Causes serious eye irritation.
 H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 - Keep container tightly closed.
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 P403+P235 - Store in a well-ventilated place. Keep cool.
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

CAS-No. : 67-63-0

EC-No. : 200-661-7

Name	Product identifier	%
propan-2-ol; isopropyl alcohol; isopropanol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0 (REACH-no) 01-2119457558-25	> 90

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Call a poison center or a doctor if you feel unwell. Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash with plenty of soap and water. Take off immediately all contaminated clothing. Get medical attention if any discomfort continues.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Rinse nose, mouth and throat with water. Contact physician if larger quantity has been consumed. Do not give victim anything to drink if he is unconscious.

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

Symptoms/effects after inhalation : May cause drowsiness or dizziness. Inhalation of vapours may cause respiratory irritation.

- Symptoms/effects after skin contact : May cause moderate irritation. May be degreasing after frequent contact. Repeated exposure may cause skin dryness or cracking.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : Ingestion may cause nausea, vomiting and diarrhea.

4.3. Indication of any immediate medical attention and special

treatment needed Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Avoid water in straight hose stream; will scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid and vapour.
- Explosion hazard : May form flammable/explosive vapour-air mixture.
- Hazardous decomposition products in case of fire : Carbon dioxide (CO₂). Carbon monoxide (CO). Highly flammable gases/vapours/fumes.

5.3. Advice for firefighters

- Firefighting instructions : Do not enter fire area without proper personal protective equipment, including respiratory protection. Exercise caution when fighting any chemical fire. Containers close to fire should be removed immediately or cooled with water.

Wear self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate ventilation, especially in confined areas. Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). No open flames. No smoking.

For non-emergency personnel

- Protective equipment : Wear appropriate personal protective equipment - see Section 8.
- Emergency procedures : Keep public away from danger area.

For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Discharging into rivers and drains is forbidden. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Dispose of at a licensed waste collection centre.
- Methods for cleaning up : Take up liquid spill into absorbent material. Post clean with water. Never pour spill back in original packaging for reuse.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Section 8 for information on personal protection equipment. See section 13 for waste handling.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Additional hazards when processed : Flammable liquid storage.
- Precautions for safe handling : Avoid spilling, skin and eye contact. Avoid inhalation of vapours. Use only outdoors or in a well-ventilated area. Ensure adequate ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, any incompatibilities

- Storage conditions : Keep cool. Protect from sunlight. Store in a dry place. Store in a well-ventilated place. Keep container tightly closed. Flammable liquid storage.
- Incompatible materials : Oxidizing substances.

7.3. Specific end use(s)

No additional data.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)		
United Kingdom	Local name	Propan-2-ol
United Kingdom	WEL TWA (mg/m ³)	999 mg/m ³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m ³)	1250 mg/m ³
United Kingdom	WEL STEL (ppm)	500 ppm

8.2. Exposure controls

- Appropriate engineering controls : Eye wash facilities and emergency shower must be available when handling this product.
- Hand protection : For prolonged or repeated skin contact use suitable protective gloves. Nitrile rubber. Breakthrough time : 6 (> 480 minutes). Layer thickness : 0,2 - 0,4 mm. STANDARD EN 374.
- Eye protection : Use splash goggles when eye contact due to splashing is possible. STANDARD EN 166.
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Use respiratory equipment with gas filter, type AX. Standard EN 149.
- Other information : Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

Thermal hazards: Highly flammable liquid and vapour.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : Colourless.
- Odour : slight.

Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: 0.1
Melting point	: -88 °C
Freezing point	: No data available
Boiling point	: 82 °C
Flash point	: 12 °C PMCC
Auto-ignition temperature	: ≈ 400 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 4.4 kPa @ 20 °c
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.8 g/cm ³ @ 20 °C
Solubility	: In water, material soluble. soluble in most organic solvents. Water: 1000 g/l
Log Pow	: No data available
Viscosity, kinematic	: 2 cSt
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Non flammable.
Explosive limits	: 2 - 13 vol %

9.2. Other information

Highly flammable liquid and vapour.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Acute toxicity : Not classified

Based on available data, the classification criteria are not met

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50 oral rat	4710 mg/kg
LD50 dermal rat	12800 mg/kg
LD50 dermal rabbit	12800 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	72.6 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Based on available data, the classification criteria are not met Causes serious eye irritation.

Respiratory or skin sensitisation	: Not classified	Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified	Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified	Based on available data, the classification criteria are not met
STOT-single exposure	: May cause drowsiness or dizziness.	
STOT-repeated exposure	: Not classified	Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified	Based on available data, the classification criteria are not met

Isopropanol (67-63-0)	
Viscosity, kinematic	2 mm ² /s

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - general : Not regarded as dangerous to the environment. This does not, however, rule out the possibility that large or frequent smaller emissions of the product may be harmful to the environment.

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LC50 fish 1	4200 mg/l
EC50 Daphnia 1	13300 mg/l Daphnia magna, 48 hours

12.2. Persistence and degradability

Isopropanol (67-63-0)	
Persistence and degradability	Readily biodegradable.
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Persistence and degradability	Readily biodegradable.
BOD (% of ThOD)	0.3 - 0.6 % ThOD BOD5/COD
Biodegradation	84 % (OECD 301D method)

12.3. Bioaccumulative potential

Isopropanol (67-63-0)	
Bioaccumulative potential	No bioaccumulation.
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Bioconcentration factor (BCF REACH)	< 100
Log Pow	2.97

12.4. Mobility in soil

Isopropanol (67-63-0)	
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Ecology - soil	soluble in water. The product is volatile and will evaporate quickly.
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12.5. Results of PBT and vPvB assessment

Isopropanol (67-63-0)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : None to our knowledge.

SECTION 13: DISPOSAL CONSIDERATIONS
13.1. Waste treatment methods

Regional legislation (waste) : Dispose as hazardous waste.






Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

Additional information : The given LoW-code is a guiding, and the code depends on how the waste is formed. User must evaluate the choice of correct code.

European List of Waste (LoW) code: 07 06 04* - other organic solvents, washing liquids and mother liquors

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1219	1219	1219	1219	1219
14.2. UN proper shipping name				
ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	Isopropanol	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)
Transport document description				
UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II, (D/E)	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II (12°C c.c.)			
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Special provisions (ADR) :
601
Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E2
Hazard identification number (Kemler No.) : 33



Orange plates :
EAC code : •2YE

- Transport by sea

Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Flash point (IMDG) : 12°C
c.c.

- Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
Special provisions (IATA) : A180

Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IBC code : No IBC-code for bulk transport offshore (MARPOL).

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU-Regulations**

No REACH Annex XVII restrictions
Isopropanol is not on the REACH Candidate List
Isopropanol is not on the REACH Annex XIV List

National regulations

EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Data sources : EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.
Date of issue : 21/11/2011
Revision date : 01/11/2018
Supersedes : 30/10/2015
Version : 3.0
Signature : K. Dyreskog

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

The information in this safety data sheet is based on information from the manufacturer/supplier, present european and national legislation, and presupposes that the product is used within the specified area of application.