



Safety Data Sheet
*according to 1907/2006/EC, Article 31, amended by
Regulation (EU) No. 453/2010*

Isopropyl alcohol

Date: 12/3/2020

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Trade Name: Isopropyl Alcohol

INCI: Isopropyl alcohol

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

Uses: No additional information

1.3 Details of the supplier of the safety data sheet

Aromantic Ltd

15 Greshop Road

Forres

Moray

IV36 2GU

Tel: +44 (0)1309 696900

Fax: +44 (0)1309 696911

Email: info@aromantic.co.uk

1.4 Emergency telephone number

Health and Safety Executive (HSE) Chemicals Regulation Directorate

5S.1 Redgrave Court, Merton Road, Bootle, Merseyside. L20 7HS

Telephone: +44 151 951 3317

Email: biocidesenquiries@hse.gsi.gov.uk

REACH and CLP UK CA Help Desk, Health and Safety Executive

2.3 Redgrave Court, Merton Road, L20 7HS Bootle, Merseyside

Email: ukreachca@hse.gsi.gov.uk

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids Category 2 --- H225

Serious eye damage/eye irritation Category 2 --- H319

Specific target organ toxicity - single exposure Category 3 --- H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

Human Health: See section 11 for toxicological information.

Physical and chemical hazards

: See section 9 for physicochemical information.

Potential environmental effects

: See section 12 for environmental information.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard Symbols



Signal word : Danger

Hazard statements :

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements

Prevention :

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

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

Response :

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Storage :

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

Hazardous components which must be listed on the label:

- **propan-2-ol**

2.3 Other hazards

For Results of PBT and vPvB assessment see section 12.5.

3. Composition/Information on ingredients

3.1 Substances

3.2 Mixtures

Classification (REGULATION (EC) No 1272/2008

Hazardous components	Amount [%]	Hazard class Hazard category	Hazard statements
Propan-2-ol			
Index No: 603-117-00-0	>=70 - <=100	Flam Liq 2	H225
CAS No: 67-63-0		Eye Irrit 2	H319
EC No: 200-661-7		STOT SE3	H336
EC Registration: 01-2119457558-25-XXXX			

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First Aid Measures

4.1 Description of first aid measures

General advice: Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.

If inhaled: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position. Call a physician immediately.

In case of skin contact: Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if

possible.

If swallowed: Rinse mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately. If a person vomits when lying on his back, place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: See Section 11 for more detailed information on health effects and symptoms.
Effects: See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixtures with air. Flash back possible over considerable distance. Heating or fire can release toxic gas. Highly flammable liquid and vapour.

Hazardous combustion products: Carbon dioxide (CO₂), Carbon monoxide, Smoke

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Wear personal protective equipment.

Further advice: Cool closed containers exposed to fire with water spray. Heating will cause a pressure rise - with risk of bursting. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Keep away unprotected persons. Provide adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist.

6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods and materials for: Contain spillage, and then collect with non-combustible containment and cleaning up absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Further information: Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on personal protective equipment. See Section 13 for waste treatment information.

7. Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling: Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures: Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Store in original container. Keep in an area equipped with solvent resistant flooring.

Advice on protection against fire and explosion: Combustible liquid. Keep away from sources of ignition - No smoking. The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixtures with air. Take measures to prevent the build up of electrostatic charge. Use only in an area containing explosion proof equipment. Ensure all equipment is electrically grounded before beginning transfer operations.

Further information on storage conditions: Keep tightly closed in a dry and cool place. Keep in a well ventilated place. Keep away from heat.

Advice on common storage: Keep away from food, drink and animal feeding stuffs. Incompatible with oxidizing agents. Do not store together with oxidizing and self-igniting products.

Suitable packaging materials: Steel, Stainless steel

7.3 Specific end use(s)

No information available

8. Exposure Controls/Personal Protection

8.1 Control parameters

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL Workers, Long-term - systemic effects, Skin contact

: 888 mg/kg bw/day

DNEL Workers, Long-term - systemic effects, Inhalation

: 500 mg/m³

DNEL Consumers, Long-term - systemic effects, Skin contact

: 319 mg/kg bw/day

DNEL Consumers, Long-term - systemic effects, Inhalation

: 89 mg/m³

DNEL Consumers, Long-term - systemic effects, Ingestion

: 26 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water

: 140.9 mg/l

Marine water

: 140.9 mg/l

Intermittent releases

: 140.9 mg/l

Sewage treatment plant (STP)

: 2251 mg/l

Sediment

: 552 mg/kg d.w.

Soil

: 28 mg/kg

Secondary poisoning

: 160 mg/kg food

Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), Short Term Exposure Limit (STEL): 500 ppm, 1,250 mg/m³

UK. EH40 Workplace Exposure Limits (WELs), Time Weighted Average (TWA): 400 ppm, 999 mg/m³

ELV (IE), Skin designation:

Can be absorbed through the skin.

ELV (IE), Time Weighted Average (TWA): 200 ppm

8.2 Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Provide sufficient air exchange and/or exhaust in work rooms. Take measures to prevent the build up of electrostatic charge.

Personal protective equipment

Respiratory protection

Advice: If ventilation is insufficient, suitable respiratory protection must be provided

Required, if exposure limit is exceeded (e.g. OEL). In the case of vapour formation use a respirator with an approved filter. Recommended Filter type: A Filter Type : Organic vapour type

Hand protection

Advice: The glove material has to be impermeable and resistant to the product / the substance / the preparation. As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use.

Protective gloves should be replaced at first signs of wear.

Material: Nitrile rubber Break through time : \geq 8 h Glove thickness : 0.35 mm

Material: butyl-rubber Break through time : \geq 8 h Glove thickness : 0.5 mm

Material: Fluorinated rubber Break through time : \geq 8 h Glove thickness : 0.4 mm

Eye protection

Advice: Tightly fitting safety goggles

Skin and body protection

Advice: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. Wear appropriate chemical resistant clothing and boots. Solvent resistant protective clothing

Environmental exposure controls

General advice: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Form: liquid

Colour: colourless clear

Odour: alcohol-like

Odour Threshold: no data available

pH: neutral

Melting point/range: ca. -89.5 °C

Boiling point/boiling range: ca. 82 °C

Flash point: ca. 12 °C (Method: closed cup)

Evaporation rate: 2.9 (Butyl Acetate = 1)

Flammability (solid, gas): Formation of explosive air/vapour mixtures is possible.

Upper explosion limit: ca. 12 %(V)

Lower explosion limit: ca. 2 %(V)

Vapour pressure: ca. 60.2 hPa (20 °C)

Relative vapour density: ca. 2

Relative density: 0.791 (15 °C)

Density: 0.785 - 0.875 g/cm³ (20 °C)

Water solubility: completely miscible

Solubility in other solvents: (organic) miscible

Partition coefficient: n-octanol/water: log K_{ow} 0.05 (OECD Test Guideline 107) Literature value

Auto-ignition temperature: ca. 399 °C

Thermal decomposition: no data available

Viscosity, dynamic: 2.1 mPa.s (25 °C)

Explosive properties: EU legislation: Not explosive

Explosivity: Formation of explosive air/vapour mixtures is possible.

Oxidizing properties: The substance or mixture is not classified as oxidizing.

9.2 Other information

Molecular weight: 60.11 g/mol

Bulk density: 791 kg/m³

10. Stability and Reactivity

10.1 Reactivity

Advice: Stable under recommended storage conditions.

10.2 Chemical stability

Advice: No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions: Exothermic reaction with strong acids. Incompatible with oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid: Keep away from heat and sources of ignition. Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid: Strong acids and oxidizing agents, Aldehydes, Halogens

10.6 Hazardous decomposition products

Hazardous decomposition products: Carbon oxides, Smoke

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity Oral

Please find this information in the listing of the component/components below in this section.

Inhalation

Please find this information in the listing of the component/components below in this section.

Dermal

Please find this information in the listing of the component/components below in this section.

Irritation

Skin

Result: Please find this information in the listing of the component/components below in this section.

Eyes

Result: Causes serious eye irritation.

Sensitisation

Result: Please find this information in the listing of the component/components below in this section.

CMR effects

CMR Properties

Carcinogenicity: Please find this information in the listing of the component/components below in this section.

Mutagenicity: Please find this information in the listing of the component/components below in this section.

Teratogenicity: Please find this information in the listing of the component/components below in this section.

Reproductive toxicity: Please find this information in the listing of the component/components below in this section.

Specific Target Organ Toxicity

Single exposure

Inhalation: May cause drowsiness or dizziness.

Repeated exposure

Remark: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Repeated dose toxicity

No data available

Aspiration hazard

No aspiration toxicity classification,

Further information

Other relevant toxicity information: Prolonged skin contact may defat the skin and produce dermatitis. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Risk of product entering the lungs on vomiting after ingestion. Liver injury may occur.

Component: propan-2-ol CAS-No. 67-63-0

Acute toxicity

Oral

LD50: 5840 mg/kg (Rat) (OECD Test Guideline 401)

Inhalation

LC50: > 25 mg/l (Rat; 6 h; vapour) (OECD Test Guideline 403)

Dermal

LD50: 13900 mg/kg (Rabbit) (OECD Test Guideline 402)

Irritation

Skin

Result: No skin irritation (OECD Test Guideline 404) Degreases the skin which may cause dry and rough. Prolonged or repeated skin contact may result in dermatitis.

Eyes

Result: Eye irritation (OECD Test Guideline 405) Splashes in eyes may cause strong pain. Vapour acts irritant.

Sensitisation

Result: not sensitizing (Buehler Test; Dermal; Guinea pig) (OECD Test Guideline 406)

CMR effects

CMR Properties

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

Mutagenicity: In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects

Teratogenicity: No effects on or via lactation

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

Specific Target Organ Toxicity

Single exposure

Inhalation: Target Organs: Central nervous system May cause drowsiness or dizziness.

Repeated exposure

Remark: Oral and inhalation repeated exposure studies demonstrated target organ effects in male rats (kidney) and male and female mice (thyroid) by mechanisms of action that are not relevant to humans

Other toxic properties

Aspiration hazard

Aspiration hazard if swallowed - can enter lungs and cause damage.

Aspiration may cause pulmonary oedema and pneumonitis. Based on available data, the classification criteria are not met.

12. Ecological Information

12.1 Toxicity

Acute toxicity

Acute aquatic toxicity

Result: Not expected to be harmful to aquatic organisms.

Component: propan-2-ol CAS-No. 67-63-0 Acute toxicity

Fish

LC50: 9640 mg/l (Pimephales promelas; 96 h) (flow-through test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

LC50: 9714 mg/l (Daphnia magna; 24 h) (static test; OECD Test Guideline 202)

algae

EC50: > 100 mg/l (Scenedesmus subspicatus; 72 h)

LOEC: 1000 mg/l (algae; 8 d)

Bacteria

EC50: > 100 mg/l (Bacteria) no harming action

12.2 Persistence and degradability

Biodegradability

Result: 95 % (Exposure Time: 21 d)(OECD Test Guideline 301E) biodegradable

Persistence

Result: Transformation due to hydrolysis not expected to be significant. Transformation due to photolysis not expected to be significant.

Biodegradability

Result: 53 % (aerobic; domestic sewage; Related to: O2 consumption; Exposure Time: 5 d)(Directive 67/548/EEC, Annex V, C.5) Readily biodegradable

12.3 Bioaccumulative potential

Component: propan-2-ol CAS-No. 67-63-0 Bioaccumulation

Result: log Kow 0.05

Bioaccumulation is not expected.

12.4 Mobility in soil

Mobility

Result: Highly mobile in soils

Distribution among environmental compartments

Soil: Koc: ca. 1.1

Mobility

Water: The product is water soluble.

Soil: Mobile in soils

12.5 Results of PBT and vPvB assessment

Result: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Result: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

13. Disposal Considerations

13.1 Waste treatment methods

Product: Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging: Dispose of contaminated packaging in the same way as the product. In accordance with local and national regulations. Do not burn, or use a cutting torch on, the empty drum. Risk of explosion.

European Waste Catalogue Number: No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14. Transport Information

14.1 UN number

1219

14.2 UN proper shipping name

ADR: ISOPROPANOL

RID: ISOPROPANOL

IMDG: ISOPROPANOL

14.3 Transport hazard class(es)

ADR-Class 3

(Labels; Classification Code; Hazard identification No; Tunnel restriction code)

3; F1; 33; (D/E)

RID-Class (Labels; Classification Code; Hazard identification No) 3; F1; 33

IMDG-Class (Labels; EmS): 3

3; F-E, S-D

14.4 Packing group

ADR: II

RID: II

IMDG: II

14.5 Environmental hazards

Environmentally hazardous according to ADR: no

Environmentally hazardous according to RID: no

Marine Pollutant according to IMDG-Code: no

14.6 Special precautions for user

N/A

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
IMDG: N/A

15. Regulatory Information

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

Other regulations: Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC):
Point Nos.: , 40; Listed

EU. Regulation No 1451/2007 [Biocides], Annex I, OJ (L 325): EC Number: , 200-661-7;
Listed

WGK (DE): WGK 1: slightly water endangering: 135; Classification source is Annex 2.

propan-2-ol:

Regulatory List	Notification	Notification number
AICS	YES	
DSL	YES	
EINECS	YES	200-661-7
ENCS (JP)	YES	(2)-207
IECSC	YES	
ISHL (JP)	YES	2-(8)-319
ISHL (JP)	YES	(2)-207
JEX (JP)	YES	(2)-207
KECI (KR)	YES	KE-29363
NZIOC	YES	HSR001180
PICCS (PH)	YES	
TSCA	YES	

15.2 Chemical safety assessment

No data available

16. Other Information

Full text of H-Statements referred to under sections 2 and 3.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Further information

Key literature references and sources for data: Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The information contained in this SDS is accurate to the best of our knowledge and has been obtained from a variety of sources. No liability can be accepted arising out of the use, application or processing of this product. It is the users' responsibility to determine the safe conditions for the use of this product.

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