

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Revision date: _____

Version: 1.0

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

1.1. Product identifier

Product form : Substance
 Substance name : Isopropyl alcohol
 EC index no : 603-003-00-0
 EC no : 200-661-7
 CAS No : 67-63-0
 Product code : 246549
 Product group : Raw material

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

1.2.1. Relevant identified uses

Main use category : Pharmaceutical
 Industrial/Professional use spec : Industrial.
 For professional use only.
 Function or use category : Raw material

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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 2031BH Haarlem - Netherlands
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info@duchefa.com - www.duchefa.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
UNITED KINGDOM	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

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-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11

Xi; R36

R67

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

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/sparks/open flames/hot surfaces. - No smoking
P233 - Keep container tightly closed
P261 - Avoid breathing vapours, mist, spray
P280 - Wear protective gloves, protective clothing, eye protection
P305 - IF IN EYES:
P351 - Rinse cautiously with water for several minutes

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Isopropyl alcohol (Main constituent)	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-003-00-0	100	F; R11 Xi; R36 R67

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isopropyl alcohol (Main constituent)	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-003-00-0	100	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of R-, H- and EUH-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If irritation persists, consult a doctor.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell. Give water to drink if victim completely conscious/alert.

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

- Symptoms/injuries : In case of repeated or prolonged exposure : Dermatitis. Dizziness, headaches, nausea. Dry skin.
- Symptoms/injuries after inhalation : May cause drowsiness or dizziness. Irritant.
- Symptoms/injuries after skin contact : Irritant. Grease skin after contact.
- Symptoms/injuries after eye contact : Irritant.
- Symptoms/injuries after ingestion : Risk of aspiration pneumonia. Asphyxiating. Risk of pneumonia. Depression of the central nervous system. Unconsciousness. Intoxication.

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

Doctor: gastric lavage. Risk of aspiration pneumonia. .

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapour. The vapours are denser than air and may travel along the ground. Distance ignition possible.
- Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapours/spray.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Collect spillage. Store away from other materials. Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel).
- Other information : Absorb spilled material with sand or earth.

6.4. Reference to other sections

Reference to other sections (8, 13).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No naked lights. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment. Use special care to avoid static electric charges.
- Storage conditions : Keep only in the original container in a cool, well-ventilated place. Keep in fireproof place. Keep container tightly closed. . Store in tightly closed, leak-proof containers of carbon steel or stainless steel.
- Incompatible products : Strong bases. Strong acids. oxidising substances. Pyrophoric material. Flammable solids.
- Incompatible products : Sources of ignition. Direct sunlight. Heat sources.
- Storage temperature : T2
- Storage area : Storage class (LGK). 3 A. VbF class. B.
- Special rules on packaging : Store in a closed container.
- Packaging materials : Do not use compressed air to either agitate or transfer the contents of storage containers (tanks) / shipping drums containing this material.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear PVC gloves, Use neoprene or rubber gloves.
- Eye protection : Safety glasses (to European standard EN 166 or equivalent).
- Skin and body protection : Rubber boots.
- Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear approved mask.
- Other information : When using, do not eat, drink or smoke.

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: No data available
Odour threshold	: No data available
pH	: 7
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -89,5 °C
Freezing point	: No data available
Boiling point	: 82 °C
Flash point	: 12 °C 170 Abel
Self ignition temperature	: 425 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour
Vapour pressure	: 4100 Pa 20 ° C
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,785 g/cm ³ 20 ° C
Solubility	: Soluble in water.
Log Pow	: < 3
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 2,43 mPa.s 20 ° C
Explosive properties	: Vapour mixes readily with air, forming explosive mixtures. not explosive.
Oxidising properties	: No data available
Explosive limits	: 2 - 12 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established. Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases. OXIDIZING AGENTS.

10.6. Hazardous decomposition products

Carbon monoxide.

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : May cause a sensitization

Isopropyl alcohol (67-63-0)	
LD50 oral rat	4570 mg/kg
LD50 dermal rat	13400 mg/kg
LC50 inhalation rat (mg/l)	30 mg/l/4h

Skin corrosion/irritation : Slight skin irritant.
Based on available data, the classification criteria are not met
pH: 7

Serious eye damage/irritation : Slight eye irritant.
Based on available data, the classification criteria are not met
pH: 7

Respiratory or skin sensitisation : Slight irritant by inhalation
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

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.
May cause drowsiness or dizziness

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Slight irritant by inhalation
Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Other information : At high concentrations: Fatigue. Dizziness. Unconsciousness.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Suffocation. May cause long lasting harmful effects to aquatic life.

Isopropyl alcohol (67-63-0)	
LC50 fishes 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l
ErC50 (algae)	> 100 mg/l

12.2. Persistence and degradability

Isopropyl alcohol (67-63-0)	
Persistence and degradability	Readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.

12.3. Bioaccumulative potential

Isopropyl alcohol (67-63-0)	
Log Pow	< 3

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Recycle the material as far as possible.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Dispose of contents/container to Dispose of this material and its container to hazardous or special waste collection point.
Additional information : Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No : 1219
UN-No.(IATA) : 1219

14.2. UN proper shipping name

Proper Shipping Name : ISOPROPANOL (ISOPROPYL ALCOHOL)
Transport document description : UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II, (D/E)

14.3. Transport hazard class(es)

Class (UN) : 3
Hazard labels (UN) : 3



14.4. Packing group

Packing group (UN) : II

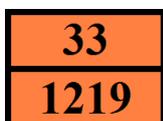
14.5. Environmental hazards

Other information : mp = 12 ° C.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 33
Classification code (UN) : F1
Orange plates :



Special provision (ADR) : 601

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Transport category (ADR) : 2
Tunnel restriction code : D/E
Limited quantities (ADR) : 1L
LQ : LQ04
Excepted quantities (ADR) : E2
EAC code : •2YE

14.6.2. Transport by sea

EmS-No. (1) : F-E
EmS-No. (2) : S-D

14.6.3. Air transport

No additional information available

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Data sources : 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.

Other information : REACH Disclaimer:
This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number). **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.

Full text of R-, H- and EUH-phrases::

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

Isopropyl alcohol

Safety Data Sheet

according to Regulation (EC) No. 453/2010

H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
R11	Highly flammable
R36	Irritating to eyes
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
Xi	Irritant

SDS EU (REACH Annex II) Duchefa

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