

Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 1 of 10

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

14459-49 Isopropyl Alcohol

CAS No: 67-63-0

EC No: 200-661-7

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

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.
5, Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324
e-Mail: info-uk@hach.com

HACH LANGE Ltd.
Unit 1, Chestnut Road Western Industrial Estate
IRL-Dublin 12
Tel. +353 (0)1 4602522
e-Mail: info-ie@hach.com

1.4. Emergency telephone number:

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

2.2. Label elements**Regulation (EC) No. 1272/2008**

Signal word: Danger

Pictograms:



Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 2 of 10

Hazard statements

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243 Take action to prevent static discharges.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			100 %
	200-661-7	603-117-00-0		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately.
Consult a physician.
Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air.
If breathing has stopped, apply artificial respiration.
Consult a physician.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing immediately. If skin irritation persists, call a physician.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 3 of 10

Obtain medical attention.

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

Irritation and corrosion, Cough, headache

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

Water, Carbon dioxide (CO₂), Alcohol-resistant foam Dry powder,

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

Carbon oxides

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Use water spray to cool unopened containers.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.

Do not breathe vapours, mist or gas.

Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Keep away from sources of ignition - No smoking.

Take measures to prevent the build up of electrostatic charge.

Do not breathe vapours/dust.

Advice on protection against fire and explosion

Highly flammable

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep tightly closed in a dry, cool and well-ventilated place.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 4 of 10

Avoid contact with skin and eyes.

Hints on joint storage

Do not store together with Acids, Oxidizing agents

7.3. Specific end use(s)Laboratory chemicals
Reagent for analysis**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

8.2. Exposure controls**Appropriate engineering controls**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Protective and hygiene measuresThe type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Wash hands before breaks and after work.**Eye/face protection**

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

In case of full contact:

Glove material : Nitrile rubber

Layer thickness: > 0,4 mm

Break through time: 480 min

In case of contact through splashing:

Glove material : Nitrile rubber

Layer thickness: > 0,2 mm

Break through time: 60 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves.

Skin protectionFlame retardant antistatic protective clothing
impervious clothing

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

In case of insufficient ventilation, wear suitable respiratory equipment.

Recommended Filter type: ABEK

Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 5 of 10

Multi-purpose combination filter: US

Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless	
Odour:	alcohol-like	
pH-Value (at 20 °C):		no data available

Changes in the physical state

Melting point:		-89,5 °C
Initial boiling point and boiling range:		82,4 °C
Sublimation point:		no data available
Softening point:		no data available
Pour point:		no data available
Ignition temperature:		399 °C
Flash point:		12 °C

Flammability

Solid:		no data available
Gas:		no data available

Explosive properties

no data available

Lower explosion limits:		2 vol. %
Upper explosion limits:		12,7 vol. %
Ignition temperature:		425 °C

Auto-ignition temperature

Solid:		no data available
Gas:		no data available

Decomposition temperature: no data available

Oxidizing properties

no data available

Vapour pressure: (at 20 °C)		43,2 hPa
Vapour pressure: (at 25 °C)		58,7 hPa

Density (at 20 °C):		0,785 g/cm ³
Bulk density:		no data available
Water solubility: (at 20 °C)		soluble

Solubility in other solvents

no data available

Partition coefficient:		no data available
Viscosity / dynamic:		no data available
Viscosity / kinematic:		no data available
Flow time:		no data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 6 of 10

Vapour density: no data available
 Evaporation rate: no data available
 Solvent separation test: no data available
 Solvent content: no data available

9.2. Other information

Solid content: no data available
 no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

no data available

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Oxidizing agents, Aluminium, Paraffin, Acids

10.6. Hazardous decomposition products

Heating can release hazardous gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

LD50/oral/rat = 5045 mg/kg

LC50/inhalation/8h/rat = 12000 ppm

LD50/dermal/rabbit = 12800 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50 mg/kg	5045	rat	RTECS
	dermal	LD50 mg/kg	12800	rabbit	
	inhalation (4 h) vapour	LC50	46,5 mg/l	rat	

Irritation and corrosivity

irritant effects

Carcinogenic/mutagenic/toxic effects for reproduction

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

STOT-single exposure

Vapours may cause drowsiness and dizziness.

STOT-repeated exposure

No information available.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 7 of 10

Aspiration hazard

No information available.

Specific effects in experiment on an animal

No information available.

Practical experience
Observations relevant to classification

No information available.

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information
12.1. Toxicity

LC50/24h/goldfish = 5000 mg/l

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50 mg/l	1400	96 h	Lepomis macrochirus (Bluegill sunfish)	
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Pseudokirchneriella subcapitata (green algae)	IUCLID
	Acute crustacea toxicity	EC50 mg/l	13299	48 h	Daphnia magna (Water flea)	IUCLID

12.2. Persistence and degradability

no data available

12.3. Bioaccumulative potential

no data available

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

no data available

Further information

Should not be released into the environment.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of used product

Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 8 of 10

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number: UN 1219
14.2. UN proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL) solution
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Classification code: F1
Special Provisions: 601
Limited quantity: 1 L
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Other applicable information (land transport)

Excepted Quantities: E2

Inland waterways transport (ADN)**Other applicable information (inland waterways transport)**

Not tested

Marine transport (IMDG)

14.1. UN number: UN 1219
14.2. UN proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Marine pollutant: --
Special Provisions: -
Limited quantity: 1 L
EmS: F-E, S-D

Other applicable information (marine transport)

Excepted Quantities: E2

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1219
14.2. UN proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es): 3
14.4. Packing group: II

Safety Data Sheet

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 9 of 10

Hazard label: 3



Special Provisions: A180
Limited quantity Passenger: 1 L
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

Excepted Quantities: E2
Passenger-LQ: Y341

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

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

Not relevant

Other applicable information

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P
These transport data apply to the entire pack

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

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

Revision: 28.02.2018
Safety datasheet sections which have been updated: 6, 12, 15
Revision: 03.07.2014
Safety datasheet sections which have been updated: 4-16

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

14459-49 Isopropyl Alcohol

Revision date: 28.02.2018

Product code: 1445949

Page 10 of 10

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.