

according to Regulation (EC) No 1907/2006

Isopropanol mind. 99,6% chemisch rein

Revision date: 09.01.2023

Product code: 21286

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

1.1. Product identifier

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REACH Registration Number:	01-2119457558-25-XXXX
CAS No:	67-63-0
Index No:	603-117-00-0
EC No:	200-661-7

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

Use of the substance/mixture

Laboratory chemicals Industrial uses: Uses of substances as such or in preparations at industrial sites Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

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1.3. Details of the supplier of the safe	<u>ty data sheet</u>	
Company name:	AnalytiChem GmbH	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax:0203/5194-290
e-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone:0203/5194-107/117
e-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	
<u>1.4. Emergency telephone</u> number:	For Hazardous Materials [or Dangerous G Exposure, or Accident Call CHEMTREC D 1-800-424-9300 Outside USA and Canada accepted)	Day or Night Within USA and Canada:

Further Information

No data available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Danger

Pictograms:

H225



Hazard statements

Highly flammable liquid and vapour.



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H319	Causes serious eye irritation.		
H336	May cause drowsiness or dizziness.		
Precautionary statemer	nts		
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.		
P240	Ground and bond container and receiving equipment.		
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
P403+P233	Store in a well-ventilated place. Keep container tightly closed.		
2.3 Other hazards			

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula:	CH3CH(OH)CH3
Molecular weight:	60,1 g/mol

Hazardous components

CAS No	Chemical name		Quantity	
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
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.

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No data available

After inhalation

Provide fresh air. Call a physician immediately.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Observe risk of aspiration if vomiting occurs. Call a physician immediately.

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



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Respiratory complaints Headache Dizziness Dizziness Inebriation Anaesthetic state Unconsciousness Repeated exposure may cause skin dryness or cracking.

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Combustible liquids

Hazardous combustion products

In case of fire may be liberated: Carbon dioxide (CO2), Carbon monoxide

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Heating causes rise in pressure with risk of bursting.

Beware of reignition.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes. Avoid contact with skin, eyes and clothes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Keep away from sources of ignition - No smoking.

This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Take action to prevent static discharges.

For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Remove persons to safety. Emergency procedures Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8



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6.2. Environmental precautions

Do not allow to enter into surface water or drains.

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Danger of explosion

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers). Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Read label before use. Handle and open container with care. When using do not eat, drink, smoke, sniff. Keep container tightly closed. Use personal protection equipment. Use extractor hood (laboratory). Do not breathe vapour/aerosol. Provide adequate ventilation.

Advice on protection against fire and explosion

Take action to prevent static discharges. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

Wash hands and face before breaks and after work and take a shower if necessary.

When using do not eat or drink.

Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

Further information on handling

Take off immediately all contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. If handled uncovered, arrangements with local exhaust ventilation have to be used.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Store in a cool dry place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Further information on storage conditions

Protect from sunlight. Protect against: Light minimum storage temperature +5°C maximum storage temperature +30°C



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7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
67-63-0	Propan-2-ol	200	-		TWA (8 h)	
		400	-		STEL (15 min)	

Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
67-63-0	2-Propanol	Acetone	40 mg/L	-	End of shift at end of workweek

DNEL/DMEL values

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
Worker DNEL,	long-term	inhalation	systemic	500 mg/m³	
Worker DNEL,	EL, long-term dermal systemic 888 mg/kg bw/day				
Consumer DNE	EL, long-term	inhalation	systemic	89 mg/m³	
Consumer DNE	EL, long-term	dermal	systemic	319 mg/kg bw/day	
Consumer DNE	EL, long-term	oral	systemic	26 mg/kg bw/day	

PNEC values

CAS No	Substance	
Environmen	tal compartment	Value
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	
Freshwater		140,9 mg/l
Freshwater	(intermittent releases)	140,9 mg/l
Marine water 140,9 mg/l		140,9 mg/l
Freshwater sediment 552 mg/kg		
Marine sediment 552 mg/kg		552 mg/kg
Secondary poisoning 160 mg/kg		160 mg/kg
Micro-organisms in sewage treatment plants (STP)		2251 mg/l
Soil 28 mg/kg		28 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles



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Face protection umbrella

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact Trade name/designation: KCL 730 Camatril® Velours Suitable material: NBR (Nitrile rubber) 0,4 mm Wearing time with permanent contact: > 480 min

By short-term hand contact Trade name/designation: KCL 720 Camapren® Suitable material: CR (polychloroprene, chloroprene rubber) 0,65 mm Wearing time with occasional contact (splashes): > 120 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear fire resistant or flame retardant clothing. Take off immediately all contaminated clothing and wash it before reuse. Wear suitable protective clothing. Take off immediately all contaminated clothing. Wash hands and face before breaks and after work and take a shower if necessary.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Filtering device with filter or ventilator filtering device of type: A

Environmental exposure controls

Do not allow to enter into surface water or drains. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Danger of explosion

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	colourless	
Odour:	like: Alcohol	
Melting point/freezing point:		-89,5 °C
Boiling point or initial boiling point and	1	82,5 °C
boiling range:		
Flammability		
Solid/liquid:		No data available
Gas:		No data available
Lower explosion limits:		2 vol. %
Upper explosion limits:		13 vol. %
Flash point:		11,7 °C



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Auto-ignition temperature:	425 °C	
Decomposition temperature:	No data available	
pH-Value (at 20 °C):	neutral	
Viscosity / kinematic:	No data available	
Water solubility:	easily soluble	
Solubility in other solvents		
No data available		
Partition coefficient n-octanol/water:	log Pow: 0,05	
Vapour pressure:	44 hPa	
(at 20 °C)	76 hPa hPa	
Vapour pressure: (at 50 °C)	70 114 114	
Density:	0,786 g/cm³	
Bulk density:	No data available	
Relative vapour density:	No data available	
9.2. Other information		
Information with regard to physical hazard clas	ses	
Explosive properties		
Vapours are heavier than air, spread along flo	ors and form explosive mixtures with air.	
Sustaining combustion:	Sustaining combustion	
Self-ignition temperature		
Solid:	No data available	
Gas:	No data available	
Oxidizing properties		
No data available		
Other safety characteristics	N N N N N	
Evaporation rate:	No data available	
Solvent separation test:	No data available	
Solvent content: Solid content:	No data available No data available	
Sublimation point:	No data available	
Softening point:	No data available	
Pour point:	No data available	
:	No data available	
Viscosity / dynamic:	2,2 mPa⋅s	
(at 20 °C)		
Flow time:	No data available	
Further Information		
No data available		
SECTION 10: Stability and reactivity		

10.1. Reactivity

Vapours may form explosive mixtures with air. Formation of: Peroxides

10.2. Chemical stability

Protect against: Light Air

10.3. Possibility of hazardous reactions

Oxidising agent, Alkali metals, Alkaline earth metal, , Nitric acid, aldehydes



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Amines, Aluminium, Chlorine (Cl2) Phosphorus trichloride, Strong acid, Phosgene Hydrogen peroxide, Nitrogen oxides (NOx), Iron.

10.4. Conditions to avoid

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

Air

10.5. Incompatible materials

Rubber articles Plastic articles

10.6. Hazardous decomposition products

Peroxides In case of fire: SECTION 5: Firefighting measures

Further information

Peroxides

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

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

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause drowsiness or dizziness. (propan-2-ol; isopropyl alcohol; isopropanol)

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.

Specific effects in experiment on an animal

No data available

Additional information on tests

No data available

Practical experience No data available

11.2. Information on other hazards

Other information

Observe risk of aspiration if vomiting occurs. Pulmonary oedema Pneumonia Repeated exposure may cause skin dryness or cracking.

Further information

No data available



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SECTION 12: Ecological information

12.1. Toxicity

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 10000 mg/l	96 h Pimephales promelas	(/	OECD Guideline 203	

12.2. Persistence and degradability

95 %; 21 d; aerob OECD-301E

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII. This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Avoid release to the environment.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Send to a physico-chemical treatment facility under observation of official regulations.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	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
Classification code:	F1



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Special Provisions: Limited quantity: Excepted quantity: Transport category: Hazard No: Tunnel restriction code:	601 1 L E2 2 33 D/E				
Inland waterways transport (ADN)					
14.1. UN number or ID number:14.2. UN proper shipping name:14.3. Transport hazard class(es):14.4. Packing group:Hazard label:Classification code:Special Provisions:Limited quantity:	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) 3 II 3 F1 601 1 L				
Excepted quantity:	E2				
Marine transport (IMDG) 14.1. UN number or ID number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Hazard label: Special Provisions: Limited quantity: Excepted quantity: EmS: Air transport (ICAO-TI/IATA-DGR) 14.1. UN number or ID number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Hazard label: Special Provisions: Limited quantity Passenger: Passenger LQ:	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) 3 II 3 - 1 L E2 F-E, S-D UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) 3 II 3 A 180 1 L Y341				
Excepted quantity: IATA-packing instructions - Passenger: IATA-max. quantity - Passenger: IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:	E2 353 5 L 364 60 L				
14.5. Environmental hazards ENVIRONMENTALLY HAZARDOUS:	No				
SECTION 15: Regulatory information					
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture					
EU regulatory information Restrictions on use (REACH, annex XVII): Entry 3, Entry 40 Information according to 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS				

National regulatory information



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Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).						
Water hazard class (D): 1 - slightly hazardous to water						

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

May cause drowsiness or dizziness.

Further Information

H336

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.