

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 2-Propanol zur Analyse VLSI ACS ISO

Revision: 29.07.2024

Product code: 34190

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

### 1.1. Product identifier

2-Propanol zur Analyse VLSI ACS ISO

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

Reagents and laboratory chemicals  
Only for laboratory and analysis purposes.

#### Uses advised against

Do not use for private purposes (household).

### 1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH  
ACD  
Street: Stempelstraße 6  
Place: D-47167 Duisburg  
Telephone: 0203/5194-0  
E-mail: info@analytichem.de  
Contact person: Abteilung Produktsicherheit  
E-mail: produktsicherheit@analytichem.de  
Internet: www.analytichem.de  
Responsible Department: Abteilung Produktsicherheit  
Telephone: 0203/5194-107/117  
Telefax: 0203/5194-290  
1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

### 1.4. Emergency telephone number:

## 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:



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**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.  
P233                    Keep container tightly closed.  
P305+P351+P338      IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3. Other hazards**

No data available

**SECTION 3: Composition/information on ingredients****3.1. Substances**

Sum formula:            CH<sub>3</sub>CH(OH)CH<sub>3</sub>  
Molecular weight:        60,1 g/mol

**Relevant ingredients**

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	01-2119457558-25-XXXX	
	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.

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Call a physician immediately.

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

Irritant

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.

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Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

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

#### **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.

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Store in a cool dry place.

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

**Hints on joint storage**

national regulations

**Further information on storage conditions**

Protect from sunlight.

Protect against: Light

minimum storage temperature +5°C

maximum storage temperature +30°C

**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/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
67-63-0	Propan-2-ol	200 400	- -		TWA (8 h) STEL (15 min)	

**Biological limit values**

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

**DNEL/DMEL values**

CAS No	Substance	DNEL type			Exposure route	Effect	Value
		DNEL type	Exposure route	Effect			
67-63-0	"propan-2-ol; isopropyl alcohol; isopropanol"						
	Worker DNEL, long-term		inhalation	systemic	500 mg/m <sup>3</sup>		
	Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day		
	Consumer DNEL, long-term		inhalation	systemic	89 mg/m <sup>3</sup>		
	Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day		
	Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day		

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#### PNEC values

CAS No	Substance	
Environmental 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
Freshwater sediment		552 mg/kg
Marine sediment		552 mg/kg
Secondary poisoning		160 mg/kg
Micro-organisms in sewage treatment plants (STP)		2251 mg/l
Soil		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

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](http://www.kcl.de)).

###### **Skin protection**

Wear fire resistant or flame retardant clothing.

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

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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.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

**Respiratory protection**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Filtering device with filter or ventilator filtering device of type: A

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**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
Odour threshold:	No data available
Melting point/freezing point:	-89,5 °C
Boiling point or initial boiling point and boiling range:	82,5 °C
Flammability:	No data available
Lower explosion limits:	2 vol. %
Upper explosion limits:	13 vol. %
Flash point:	11,7 °C
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	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	log Pow: 0,05
Dispersion stability:	No data available
Vapour pressure:	44 hPa
(at 20 °C)	
Vapour pressure:	76 hPa hPa
(at 50 °C)	
Density:	0,786 g/cm³
Relative density:	0,8
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

**9.2. Other information****Information with regard to physical hazard classes****Explosive properties**

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

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Sustained combustibility:	Sustained combustibility
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Oxidizing properties	
No data available	

#### Other safety characteristics

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
Viscosity / dynamic: (at 20 °C)	2,2 mPa·s
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, chromium trioxide, Nitric acid, aldehydes

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

various plastics

### 10.6. Hazardous decomposition products

Peroxides

In case of fire:

SECTION 5: Firefighting measures

#### Further information

Peroxides

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**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Toxicokinetics, metabolism and distribution**

No data available

**Acute toxicity**

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

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

**Irritation and corrosivity**

Serious eye damage/eye irritation: 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**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: 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

**SECTION 12: Ecological information****12.1. Toxicity**

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

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	10000	96 h	Pimephales promelas	Publication (1983)	OECD Guideline 203

**12.2. Persistence and degradability**

95 %; 21 d; aerob

OECD-301E

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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.

#### 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)**

<b>14.1. UN number or ID number:</b>	UN 1219
<b>14.2. UN proper shipping name:</b>	ISOPROPANOL (ISOPROPYL ALCOHOL)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
Classification code:	F1
Special Provisions:	601
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

#### **Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 1219
<b>14.2. UN proper shipping name:</b>	ISOPROPANOL (ISOPROPYL ALCOHOL)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
Classification code:	F1

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Special Provisions: 601  
Limited quantity: 1 L  
Excepted quantity: E2

#### Marine transport (IMDG)

**14.1. UN number or ID 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  
Special Provisions: -  
Limited quantity: 1 L  
Excepted quantity: E2  
EmS: F-E, S-D

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number or ID 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  
Special Provisions: A180  
Limited quantity Passenger: 1 L  
Passenger LQ: Y341  
Excepted quantity: E2  
IATA-packing instructions - Passenger: 353  
IATA-max. quantity - Passenger: 5 L  
IATA-packing instructions - Cargo: 364  
IATA-max. quantity - Cargo: 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, Entry 75

Information according to Directive

2012/18/EU (SEVESO III):

P5c FLAMMABLE LIQUIDS

#### National regulatory information

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

#### Changes

This data sheet contains changes from the previous version in section(s): 2,9,12,15.

#### Abbreviations and acronyms

Flam. Liq. 2: Flammable liquids, hazard category 2

Eye Irrit. 2: Eye irritation, hazard category 2

STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3

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#### 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.

#### Further Information

Provide appropriate information, instructions and training to users

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.