

Propanol-2 (iso)/water 50/50 mixture

Revision: 18.09.2024

Product code: AC15.05981

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

1.1. Product identifier

Propanol-2 (iso)/water 50/50 mixture

UFI: FH5J-X240-9WCJ-ESD9

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

Details of the supplier of the safety data sheet

Company name: AnalytiChem Services, Unipessoal, Lda
 Street: Rua de Júlio Dinis 676 7º
 Place: N-4050-320 Porto
 Telephone: +351 226002917
 E-mail: info@analytichem.com
 Contact person: SDS service department
 E-mail: SDS@analytichem.com
 Internet: www.analytichem.com
 Responsible Department: SDS service department

Supplier or manufacturer details

Company name: AnalytiChem Belgium NV
 Street: Industriezone "De Arend" 2
 Place: B-8210 Zedelgem
 Telephone: +32 50 28 83 20
 E-mail: info.be@analytichem.com
 Contact person: SDS service department
 E-mail: SDS@analytichem.com
 Responsible Department: AnalytiChem:
 EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20
 EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200
 EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848
 UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500
 USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378
 Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701
 Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333
 +44 20 3807 3798 (CHEMTREC)

1.4. Emergency telephone number:

Further Information

inapplicable, this product is a mixture REACH registration number see section 3

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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****Hazard components for labelling**

"propan-2-ol; isopropyl alcohol; isopropanol"

Signal word: Danger**Pictograms:****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.

P280

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

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.

P403+P235

Store in a well-ventilated place. Keep cool.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures**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"			40 - < 45 %
	200-661-7	603-117-00-0	01-2119457558-25	
	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

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(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

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.

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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
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.

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Handle and open container with care.
When using do not eat, drink, smoke, sniff.
Keep container tightly closed.
Use personal protection equipment.
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.

Hints on joint storage

Take national regulations into account.

Further information on storage conditions

Protect from sunlight.
Protect against: Light

7.3. Specific end use(s)

Laboratory chemicals

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

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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, long-term		dermal	systemic	888 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	89 mg/m³
Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day

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.

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: vertrieb@kcl.de with the following specification (test according to EN 374):

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

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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.

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

Respiratory protection necessary at: aerosol or mist formation

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:		No data available
Boiling point or initial boiling point and boiling range:		>35 °C
Flammability:		No data available
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		20 °C
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		No data available
Viscosity / kinematic:		No data available
Water solubility:		easily soluble
Solubility in other solvents		No data available
Partition coefficient n-octanol/water:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density:		0,9164 g/cm³

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Bulk density: No data available
Relative vapour density: 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.

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: No data available

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.

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 (NO_x), 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

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Peroxides

In case of fire:

SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information**11.1. Information on hazard classes****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

Acute toxicity

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

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

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

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

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

There are no data available on the mixture itself.

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

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

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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

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

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

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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.

Do not empty into drains.

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)**

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
Classification code:	F1
Special Provisions:	601
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2

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Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)

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
Classification code: F1
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).

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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): 1,2,7,9,10,12,15.

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

Classification for mixtures and used evaluation method

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H336	Calculation method

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

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.

Provide appropriate information, instructions and training to users

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)