

Isopropanol

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

1.1 - Product identifier

Trade name/designation Isopropanol

Chemical name

Product type Mixture

Product code 704.400

UFI: CT10-T08P-000T-QHGK

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

1.3 - Details of the supplier providing the safety data sheet

ECS Cleaning Solutions GmbH

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1.4 - Emergency number

Germany: Intoxications Information Center; +49 761 19240

Switzerland: Swiss Toxicological Information Center; +41 44 251 51 51

Austria: Intoxication information center; +43 1 406 43 43

SECTION 2: Potential hazards

2.1 - Classification of the substance or mixture

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

Eye Irrit. 2	Eye irritation - Category 2
STOT SE 3 (H336)	Specific target organ toxicity (single exposure) - Category 3 (H336)
Aerosol 1	Aerosol - Category 1

2.2 - Labeling elements

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

Contains: 2-propanol, isopropyl alcohol, isopropanol (CAS No.: 67-63-0)

Signal word : Danger

Hazard pictograms



Hazard warnings

H222	Extremely flammable aerosol
H229	Pressurized container: Can burst when heated
H319	Causes serious eye irritation

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H336	May cause drowsiness and dizziness
Safety instructions	

P102	Keep out of the reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Do not smoke.
P211	Do not spray against an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P271	Only use outdoors or in well-ventilated rooms.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove any contact lenses if possible. Continue rinsing.
P410+P412	Protect from sunlight. Do not expose to temperatures above 50 °C/122 °F.
P501	Dispose of contents/container to an appropriate recycling or disposal facility/authorized treatment center in accordance with national regulations.
EUH phrases	: none

Regulation (EC) No 648/2004 on detergents

2.3 - Other hazards

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

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

SECTION 3: Composition / Information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class(es)	Specific concentration limit
2-propanol, isopropyl alcohol, isopropanol	CAS No. : 67-63-0 INDEX No. : 603-117-00-0 EC no. : 200-661-7	> 90 - < 99	Eye Irrit. 2 - H319 Flam. Liq. 2 - H225 STOT SE 3 (H336) - H336	Not applicable
carbon dioxide	CAS No. : 124-38-9 INDEX No. : EC no. : 204-696-9	> 1 - < 10	Press. Gas (Comp.) - H280	Not applicable

SECTION 4: First aid measures

4.1 - Description of first aid measures

After inhalation - No special measures are required.
- Provide fresh air.

After skin contact - Wash off immediately with: Water
- In all cases of doubt or if symptoms are present, seek medical advice.

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After eye contact - Immediately rinse carefully and thoroughly with eye wash or water.
- If eye irritation occurs, consult an ophthalmologist.

After ingestion - Rinse mouth thoroughly with water.
- DO NOT induce vomiting.

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

Symptoms and effects - After inhalation - There is no information available.

Symptoms and effects - After skin contact - There is no information available.

Symptoms and effects - After eye contact - Causes eye irritation.

Symptoms and effects - After ingestion - There is no information available.

4.3 - Information on immediate medical assistance or special treatment

SECTION 5: Fire-fighting measures

5.1 - Extinguishing agents

Suitable extinguishing agents - ABC powder
- Carbon dioxide (CO₂)
- Foam
- Extinguishing powder

Unsuitable extinguishing agents - Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture - There is no information available.

5.3 - Instructions for firefighting

- Adapt extinguishing measures to the surroundings.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

Staff not trained for emergencies - Use personal protective equipment.

Emergency services - There is no information available.

6.2 - Environmental protection measures

- There is no information available.

6.3 - Methods and material for containment and cleaning

Methods and material for retention - There is no information available.

Methods and material for cleaning - Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder).
- Wash off with plenty of water.

Unsuitable methods - There is no information available.

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6.4 - Reference to other sections

- Disposal: see section 13
- Personal protective equipment: see section 8

SECTION 7: Handling and storage

7.1 - Protective measures for safe handling

<u>Recommendation</u>	- Avoid: Eye contact - It is recommended that all work processes are designed in this way, that the following is excluded: Eye contact
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<u>Notes on general industrial hygiene</u>	- There is no information available.
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7.2 - Conditions for safe storage taking into account incompatibilities

- There is no information available.

7.3 - Specific end uses

SECTION 8: Exposure controls/personal protective equipment

8.1 - Parameters to be monitored

2-propanol, isopropyl alcohol, isopropanol (67-63-0)

IOELV TWA mg/m3 (UE)	1250 mg/m3
IOELV TWA ppm (UE)	400 ppm
IOELV STEL mg/m3 (UE)	999 mg/m3
IOELV STEL ppm (UE)	400 ppm
TRGS900 mg/m3 (DE)	500 mg/m3
TRGS900 ppm (DE)	200 ppm

carbon dioxide (124-38-9)

IOELV TWA mg/m3 (UE)	9150 mg/m3
IOELV TWA ppm (UE)	5000 ppm
IOELV STEL mg/m3 (UE)	27400 mg/m3
IOELV STEL ppm (UE)	15000 ppm
TRGS900 mg/m3 (DE)	9100 mg/m3
TRGS900 ppm (DE)	5000 ppm

DNEL / PNEC

2-propanol, isopropyl alcohol, isopropanol (67-63-0)

Type	Value	User	Effect
DNEL Long-term oral (repeated)	26 mg/kg bw/day	Consumers	Systemic
DNEL long-term inhalative	500 mg/m3	Workers	Systemic
DNEL long-term inhalative	89 mg/m3	Consumers	Systemic
DNEL long-term dermal	888 mg/kg bw/day	Workers	Systemic
DNEL long-term dermal	319 mg/kg bw/day	Consumers	Systemic
PNEC Water bodies, fresh water	140.9 mg/l		
PNEC Water bodies, seawater	140.9 mg/l		
PNEC Waters, periodic release	140.9 mg/l		
PNEC Sediment, fresh water	552 mg/kg		
PNEC Sediment, seawater	552 mg/kg		

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PNEC Secondary poisoning	160 mg/kg		
PNEC Wastewater treatment plant (STP)	2251 mg/l		

8.2 - Exposure controls and monitoring

Suitable technical control equipment

- There is no information available.

Individual protective measures, for example personal protective equipment

- Suitable eye protection: Frame goggles with side protection



- Suitable eye protection: Dust protection goggles



- Suitable body protection: Lab coat



SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

<u>Aggregate state</u>	liquid	<u>Appearance</u>	Aerosol
<u>Color</u>	colorless	<u>Odor</u>	Characteristic
Odor threshold	No data available		
pH value	No data available		
Melting point	-89.5 °C		
Freezing point	No data available		
Boiling point	< 90 °C		
Flash point	13 °C		
Evaporation rate	No data available		
Flammability	No data available		
Lower explosion limit	2 % vol.		
Upper explosion limit	12 % vol.		
Vapor pressure	43 hPa		
Vapor density	No data available		
Relative density	No data available		
Density	No data available		
Solubility (water)	No data available		
Solubility (ethanol)	No data available		
Solubility (acetone)	No data available		
Solubility (organic solvents)	No data available		
Log KOW	No data available		
Auto-ignition temperature	425 °C		
Decomposition temperature	No data available		
Viscosity, kinematic	No data available		
Viscosity, dynamic	No data available		

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Particle properties

Particle size	No data available
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9.2 - Other information

VOC content	96.6 %
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered non-reactive under normal conditions of use.

10.2 - Chemical stability

- The product is chemically stable under the recommended storage, use and temperature conditions.

10.3 - Possibility of hazardous reactions

- No hazardous reactions will occur if handled and stored as directed.

10.4 - Conditions to avoid

- There is no information available.

10.5 - Incompatible materials

- There is no information available.

10.6 - Hazardous decomposition products

- Does not decompose when used as intended.

SECTION 11: Toxicological information

11.1 - Information on hazard classes according to Regulation (EC) No. 1272/2008

Acute toxicity - Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapors (rat)	No data available

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

Toxicity : Substances

2-propanol, isopropyl alcohol, isopropanol (67-63-0)

LD50 oral (rat)	5840 mg/kg
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	LD50 dermal (rabbit)	13900 mg/kg
<u>Corrosive/irritant effect on the skin</u>	- Not classified	
<u>Serious eye damage/irritation</u>	- Eye irritation - Category 2 - Causes serious eye irritation	
	- Irritating to the eyes.	
<u>Sensitization of the respiratory tract/skin</u>	- Not classified	
<u>Germ cell mutagenicity</u>	- Not classified	
<u>Carcinogenicity</u>	- Not classified	
<u>Reproductive toxicity</u>	- Not classified	
<u>Specific target organ toxicity at single exposure</u>	- Specific target organ toxicity (single exposure) - Category 3 (H336) - May cause drowsiness or dizziness	
<u>Specific target organ toxicity - repeated exposure</u>	- Not classified	
<u>Aspiration hazard</u>	- Not classified	

11.2 - Information on other hazards

SECTION 12: Environmental information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

Toxicity : Substances

2-propanol, isopropyl alcohol, isopropanol (67-63-0)

EC50 48 hr crustacea	9714 mg/l
LC50 96 hr fish	9640 mg/l
ErC50 algae	> 100 mg/l

- The substance/mixture does not meet the criteria for acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available

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% biodegradation in 28 days	No data available
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- There is no information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOW	No data available

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- There is no information available.

12.5 - Results of PBT and vPvB assessment

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

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

12.6 - Endocrine disrupting properties

12.7 - Other adverse effects

- There is no information available.

SECTION 13: Disposal instructions

13.1 - Waste treatment processes

Waste treatment processes - Disposal in accordance with official regulations.

Disposal via waste water - There is no information available.

Special precautions - There is no information available.

Community or national or regional legislation - There is no information available.

SECTION 14: Transport information

14.1 - UN number or ID number

<u>UN number (ADR)</u>	:	UN1950
<u>UN number (RID)</u>	:	UN1950
<u>UN number (ADN)</u>	:	UN1950
<u>UN number (IMDG)</u>	:	UN1950
<u>UN number (IATA)</u>	:	UN1950

14.2 - UN proper shipping name

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UN proper shipping name (ADR) : PRESSURIZED GAS PACKS

UN proper shipping name (RID) : PRESSURIZED GAS PACKS

UN proper shipping name (ADN) : PRESSURIZED GAS PACKS

UN proper shipping name (IMDG) : PRESSURIZED GAS PACKS

UN proper shipping name (IATA) : AEROSOLS, FLAMMABLE

14.3 - Transport hazard classes

ADR : 2
Transport hazard classes
ADR classification code: : 5F

Pictograms



Transport hazard classes (RID) : 2

Pictograms



Transport hazard classes (ADN) : 2

Pictograms



Transport hazard classes (IMDG) : 2

Pictograms



Transport hazard classes (IATA) : 2

Pictograms



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14.4 - Packing group

Packaging group :
Packing group (RID) :
Packaging group (ADN) :
Packing group (IMDG) :
Packing group (IATA) :

14.5 - Environmental hazards

Environmental hazards : No
Marine pollutant : No

14.6 - Special precautions for the user

ADR

ADR classification code : 5F
ADR special regulations : 190+327+344+625
ADR Limited Quantity (LQ) : 1L
ADR Exempted quantities : E0
ADR packing instructions : P207 LP200
ADR packaging special regulations : PP87 RR6 L2
ADR regulations for mixed packing : MP9
Instructions for portable tanks and bulk containers :
Special regulations for portable tanks and bulk containers :
ADR tank coding :
ADR tanks Special regulations :
Vehicle for transportation in tanks :
ADR transport category : 2
ADR tunnel restriction code : D
ADR special regulations for loading, unloading and handling : CV9 CV12
Special regulations for packages : V14
Special regulations for loose fill :
Special regulations for operation : S2
ADR Hazard No. (Kemler number) :

RID

Special regulations :
Limited quantity (LQ) :
Released quantities :

ADN

Special regulations :
Limited quantity (LQ) :
Released quantities :

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IMDG

<u>Special regulations</u>	:	63 190 277 327 344 381 959
<u>Limited quantity (LQ)</u>	:	
<u>Released quantities</u>	:	E0
<u>Packaging instructions</u>	:	P207 LP200
<u>Packaging Special regulations</u>	:	PP87 L2
<u>IBC instruction(s)</u>	:	
<u>IBC regulations</u>	:	
<u>Instructions for portable tanks and bulk containers</u>	:	
<u>Special regulations for portable tanks and bulk containers</u>	:	
<u>EmS codes</u>	:	F-D, S-U
<u>Stowage and handling</u>	:	Category None SW1 SW22
<u>Separation</u>	:	SG69
<u>Properties and remarks</u>	:	

IATA

<u>PCA - Released quantities</u>	:	E0
<u>PCA - Limited Quantity - Packing Instructions</u>	:	Y203
<u>PCA - Limited Quantity - Maximum Net Quantity per Package</u>	:	30kg
<u>PCA - Packing Instructions</u>	:	203
<u>PCA - Maximum Net Quantity per Package</u>	:	75kg
<u>CAO - Packing Instructions</u>	:	203
<u>CAO - Maximum Net Quantity per Package</u>	:	150kg
<u>Special regulations</u>	:	A145 A167 A802
<u>ERG Code</u>	:	10L

14.7 - Transport in bulk by sea according to IMO instruments

SECTION 15: Legislation

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

<u>Substances REACH candidates</u>	No
<u>Substances Annex XIV</u>	No
<u>Substances Annex XVII</u>	No

VOC content 96.6 %

Regulation (EC) No 648/2004 on detergents

15.2 - Chemical safety assessment

Chemical safety assessment carried out for the product - There is no information available.

SECTION 16: Other information

SDS versions

Isopropanol

Version	Issue date	Author	Description of the changes
1	11/16/2022		

Texts of the regulatory sentences

Aerosol 1	Aerosol - Category 1
Eye Irrit. 2	Eye irritation - Category 2
Eye Irrit. 2A	Eye irritation - Category 2A
Flam. Liq. 2	Flammable liquid and vapor. - Category 2
H222	Extremely flammable aerosol
H225	Highly flammable liquid and vapor
H229	Pressurized container: Can burst when heated
H280	Contains gas under pressure; can explode when heated
H319	Causes serious eye irritation
H336	May cause drowsiness and dizziness
Press. Gas (Comp.)	Compressed gas
STOT SE 3 (H336)	Specific target organ toxicity (single exposure) - Category 3 (H336)

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