

# SAFETY DATA SHEET according to Regulation 1907/2006



Product name: **Mass Air Flow Sensor Clean+ c38**  
Creation date: **3.6.2021** · Revision: **30.7.2021** · Version: **1**

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

#### Product name

**Mass Air Flow Sensor Clean+ c38**



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

#### Relevant identified uses

Cleaning agent.

#### Uses advised against

No information.

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

#### Supplier

BIZOL Germany GmbH  
Address: Martin-Buber-Str. 12, D-14163 Berlin, Germany  
Phone: +49 30 804869 0  
Fax: +49 30 804 869 2860  
E-mail: support@bizol.de

### 1.4. Emergency telephone number

112

+49 30 804869 0 (von 8.30 bis 17.30 an den Werktagen)

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 (CLP)

Aerosol 1; H222 Extremely flammable aerosol.  
Aerosol 1; H229 Pressurised container: May burst if heated.  
Asp. Tox. 1; H304 May be fatal if swallowed and enters airways.  
Skin Irrit. 2; H315 Causes skin irritation.  
Eye Irrit. 2; H319 Causes serious eye irritation.  
STOT SE 3; H336 May cause drowsiness or dizziness.  
Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

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## 2.2 Label elements

### 2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]



Signal word: **Danger**

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P273 Avoid release to the environment.

P302 + P352 + P362 + P364 IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.

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

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

### 2.2.2. Contains:

propan-2-ol (CAS: 67-63-0, EC: 200-661-7, Index: 603-117-00-0)

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (CAS: 64742-49-0, EC: 927-510-4)

### 2.2.3. Special provisions

Special hazards are not known or expected.

## 2.3. Other hazards

Vapors can form an explosive mixture with air.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

For mixtures see 3.2.

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## 3.2. Mixtures

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
propan-2-ol	67-63-0 200-661-7 603-117-00-0	50-100	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336		01-2119457558-25
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	64742-49-0 927-510-4 -	25-50	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411		01-2119475515-33
carbon dioxide	124-38-9 204-696-9 -	2,5-10	Press. Gas; H280		-
n-hexane	110-54-3 203-777-6 601-037-00-0	<1	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Repr. 2; H361f STOT RE 2; H373 Aquatic Chronic 2; H411	STOT RE 2; H373: C ≥ 5 %	-

## SECTION 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

#### General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency.  
No action shall be taken involving any personal risk or without suitable training.

#### Following inhalation

Remove patient to fresh air - move out of dangerous area. Keep at rest in a position comfortable for breathing. If symptoms develop and persist, seek medical attention. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Seek medical help immediately. In case of unconsciousness bring patient into stable side position and seek medical attention.

#### Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. If symptoms develop and persist, seek medical attention. Wash contaminated clothes and shoes before reuse.

#### Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

#### Following ingestion

Not likely. Accidental ingestion: Rinse mouth thoroughly with water. Do not induce vomiting! Immediately consult a doctor. Show the physician the safety data sheet or label.

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

#### Inhalation

Vapours may cause drowsiness and dizziness.  
Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.  
Coughing, sneezing, nasal discharge, labored breathing.

#### Skin contact

Irritating to the skin.  
Itching, redness, pain.

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## Eye contact

Strongly irritates the eyes.  
Redness, tearing, pain.

## Ingestion

Not likely.  
Accidental ingestion:  
May cause abdominal discomfort.  
May cause nausea/vomiting and diarrhea.  
Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area.  
May be fatal if swallowed and enters airways.

## 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

Foam.  
Fire extinguishing powder.  
Carbon dioxide (CO<sub>2</sub>).  
Water spray. Extinguish large fires with water spray or alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

Full water jet.

### 5.2. Special hazards arising from the substance or mixture

#### Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>). Various hydrocarbons.  
Aldehydes. Soot.

### 5.3. Advice for firefighters

#### Protective actions

In case of fire evacuate the area. In case of fire or heating do not breathe fumes/vapours. Vapours can form explosive mixtures with air. Prolonged heating can cause an explosion. Cool containers at risk with water spray. If possible remove containers from endangered area. No action shall be taken involving any personal risk or without suitable training.

#### Special protective equipment for firefighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

#### Additional information

Contaminated extinguishing agents must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

##### **Protective equipment**

Use personal protective equipment (Section 8).

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## Emergency procedures

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking! Evacuate the danger zone. Prevent access to unprotected personnel. Prevent access to unauthorised personnel. Avoid contact with skin, eyes and clothing. Do not breathe vapour or mist.

### 6.1.2. For emergency responders

Use personal protective equipment.

## 6.2. Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

## 6.3. Methods and material for containment and cleaning up

### 6.3.1. For containment

Stem the spill if this does not pose risks.

### 6.3.2. For cleaning up

Prevent release into the sewer, water, basements or confined areas. Collect the spray cans and hand them over to an authorized waste disposal contractor. Release of liquid because of damaged aerosol can (release of large quantities): In case of bigger spill, dam the spillage, pump the liquid into appropriate labelled containers, absorb a residue with absorbent material and dispose of according to local regulations. Do not absorb spillage with sawdust or other combustible material. Dispose in accordance with applicable regulations (see Section 13). Clean residue from spill site.

### 6.3.3. Other information

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## 6.4. Reference to other sections

See also Sections 8 and 13.

## SECTION 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

#### 7.1.1. Protective measures

##### **Measures to prevent fire**

Ensure adequate ventilation. Protect from open fire and other sources of ignition or heat. Pressurized container; protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or incandescent material. Vapours and air form explosive mixtures. Take precautionary measures against static discharges. Use spark-proof tools.

##### **Measures to prevent aerosol and dust generation**

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

##### **Measures to protect the environment**

Avoid release to the environment.

#### 7.1.2. Advice on general occupational hygiene

Consider measures required in Section 8 of this safety data sheet. Use personal protective equipment. Refer to instructions on label and regulations for safety and health at work. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/mist.

### 7.2. Conditions for safe storage, including any incompatibilities

#### 7.2.1. Technical measures and storage conditions

Store in accordance with local regulations. Keep in well closed containers. Keep in cool and well ventilated area. Keep away from sources of ignition - no smoking. Protect against heat and direct sunlight. Keep away from oxidising substances. Keep away from food, drink and animal feeding stuffs.

#### 7.2.2. Packaging materials

The original container of producer.

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## 7.2.3. Requirements for storage rooms and vessels

Do not store in unlabelled containers.

## 7.2.4. Storage class

-

## 7.2.5. Further information on storage conditions

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## 7.3. Specific end use(s)

### Recommendations

-

### Industrial sector specific solutions

-

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

Name (CAS)	Limit values		Short-term exposure limit		Remarks	Biological Tolerance Values
	ml/m <sup>3</sup> (ppm)	mg/m <sup>3</sup>	ml/m <sup>3</sup> (ppm)	mg/m <sup>3</sup>		
Propan-2-ol (67-63-0)	400	999	500	1250		
Carbon dioxide (124-38-9)	5000	9150	15000	27400		
n-Hexane (110-54-3)	20	72				
Normal and branched chain alkanes ≥C7 (-)		1200				
Cycloalkanes ≥C7 (-)		800				

#### 8.1.2. Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values.

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### 8.1.3. DNEL/DMEL values

**For components**

Name	Type	Exposure route	Exposure frequency	Value	Remark
propan-2-ol (67-63-0)	Worker	inhalation	long term (systemic effects)	500 mg/m <sup>3</sup>	
propan-2-ol (67-63-0)	Worker	dermal	long term (systemic effects)	888 mg/kg bw/day	
propan-2-ol (67-63-0)	Consumer	inhalation	long term (systemic effects)	89 mg/m <sup>3</sup>	
propan-2-ol (67-63-0)	Consumer	dermal	long term (systemic effects)	319 mg/kg bw/day	
propan-2-ol (67-63-0)	Consumer	oral	long term (systemic effects)	26 mg/kg bw/day	
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Worker	inhalation	long term (systemic effects)	2085 mg/m <sup>3</sup>	
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Worker	dermal	long term (systemic effects)	300 mg/kg bw/day	
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Consumer	inhalation	long term (systemic effects)	447 mg/m <sup>3</sup>	
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Consumer	dermal	long term (systemic effects)	149 mg/kg bw/day	
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Consumer	oral	long term (systemic effects)	149 mg/kg bw/day	

### 8.1.4. PNEC values

**For components**

Name	Exposure route	Value	Remark
propan-2-ol (67-63-0)	fresh water	140,9 mg/L	
propan-2-ol (67-63-0)	water, intermittent release	140,9 mg/L	fresh water
propan-2-ol (67-63-0)	marine water	140,9 mg/L	
propan-2-ol (67-63-0)	water treatment plant	2251 mg/L	
propan-2-ol (67-63-0)	fresh water sediment	552 mg/kg	dry weight
propan-2-ol (67-63-0)	marine water sediment	552 mg/kg	dry weight
propan-2-ol (67-63-0)	soil	28 mg/kg	dry weight
propan-2-ol (67-63-0)	food chain	160 mg/kg feed	oral

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering control

**Substance/mixture related measures to prevent exposure during identified uses**

Handle in accordance with good industrial hygiene and safety practice. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/aerosols. Keep away from foodstuffs, beverages and feed. If technical measures to reduce workers' exposure are not sufficient, and the limit values of hazardous substances in the air are exceeded, it is necessary to use personal protective equipment.

**Organisational measures to prevent exposure**

Remove all contaminated clothes immediately and wash them before reuse. If this product contains ingredients with exposure limits, personal, workplace atmosphere monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protection.

**Technical measures to prevent exposure**

Provide good ventilation and local exhaust in areas with increased concentration.

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## 8.2.2. Personal protective equipment

### **Eye and face protection**

Safety goggles (EN 166).

### **Hand protection**

Protective gloves (EN 374).

### **Skin protection**

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345).

### **Respiratory protection**

In case of insufficient ventilation wear suitable respiratory protection. If the concentration limit values are exceeded, it is necessary to wear appropriate respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

### **Thermal hazards**

-

## 8.2.3. Environmental exposure controls

### **Technical measures to prevent exposure**

Do not allow product to reach drains, sewage systems or ground water.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

-	<b>Physical state:</b>	liquid; aerosol
-	<b>Colour:</b>	colourless
-	<b>Odour:</b>	characteristic

### Important health, safety and environmental information

-	<b>pH</b>	No information.
-	<b>Melting point/freezing point</b>	No information.
-	<b>Initial boiling point/boiling range</b>	No information.
-	<b>Flash point</b>	No information.
-	<b>Evaporation rate</b>	No information.
-	<b>Flammability (solid, gas)</b>	No information.
-	<b>Explosion limits (vol%)</b>	No information.
-	<b>Vapour pressure</b>	41 hPa at 20 °C (propan-2-ol)
-	<b>Vapour density</b>	No information.
-	<b>Density</b>	<b>Density:</b> 0,743 kg/L at 20 °C (data refers to the liquid portion of the product)
-	<b>Solubility</b>	No information.
-	<b>Partition coefficient</b>	No information.
-	<b>Auto-ignition temperature</b>	No information.
-	<b>Decomposition temperature</b>	No information.
-	<b>Viscosity</b>	No information.
-	<b>Explosive properties</b>	No information.
-	<b>Oxidising properties</b>	No information.



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## 9.2. Other information

- <b>Weight organic solvents</b>	742 g/l (VOC - includes the propellant) 96 % (VOC - includes the propellant)
- <b>Remarks:</b>	

## SECTION 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

### 10.3. Possibility of hazardous reactions

The product is stable under recommended storage and handling conditions.

### 10.4. Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not expose to heat and direct sunlight. Do not store above 50°C.

### 10.5. Incompatible materials

Oxidants. Halogens. Halogenated compounds.  
Strong acids. Aldehydes.

### 10.6. Hazardous decomposition products

In case of fire/explosion vapours/gases that pose a health hazard are released.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### (a) Acute toxicity

Name	Exposure route	Type	Species	Time	Value	Method	Remark
propan-2-ol (67-63-0)	inhalation	LC <sub>50</sub>	rat	4 h	> 20 mg/l		
propan-2-ol (67-63-0)	dermal	LD <sub>50</sub>	rabbit		> 2000 mg/kg		
propan-2-ol (67-63-0)	oral	LD <sub>50</sub>	rat		> 2000 mg/kg		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	dermal	LD <sub>50</sub>	rat	24 h	> 2920 mg/kg bw		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	oral	LD <sub>50</sub>	rat		> 5840 mg/kg bw		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	inhalation (vapours)	LC <sub>50</sub>	rat	4 h	> 23300 mg/m <sup>3</sup>	OECD 403	

**Additional information:** The product is not classified for acute toxicity.

#### (b) Skin corrosion/irritation

Name	Species	Time	Result	Method	Remark
propan-2-ol (67-63-0)			Non-irritant.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)			Irritating.		

**Additional information:** Causes skin irritation.

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## (c) Serious eye damage/irritation

Name	Species	Time	Result	Method	Remark
propan-2-ol (67-63-0)			Moderately irritating.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)			Not classified.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)			Contact with eyes may cause irritation.		

**Additional information:** Causes serious eye irritation.

## (d) Respiratory or skin sensitisation

Name	Exposure route	Species	Time	Result	Method	Remark
propan-2-ol (67-63-0)	-			According to known data the substance is not a chemical sensitizer.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	-			Not classified.		

**Additional information:** The product is not classified as sensitising.

## (e) (Germ cell) mutagenicity

Name	Type	Species	Time	Result	Method	Remark
propan-2-ol (67-63-0)				The chemical is not classified as mutagenic.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Genotoxicity			Negative.		

## (f) Carcinogenicity

Name	Exposure route	Type	Species	Time	Value	Result	Method	Remark
propan-2-ol (67-63-0)						Substance is not classified as carcinogenic.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)						Substance is not classified as carcinogenic.		

## (g) Reproductive toxicity

Name	Reproductive toxicity type	Type	Species	Time	Value	Result	Method	Remark
propan-2-ol (67-63-0)						The chemical is not classified as toxic for reproduction.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Reproductive toxicity		rat			The results of animal studies gave no indication of a fertility impairing effect.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Developmental toxicity		rat			Did not show teratogenic effects in animal experiments.		
n-hexane (110-54-3)	Reproductive toxicity					Suspected of damaging fertility.		

## Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

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## (h) STOT-single exposure

Name	Exposure route	Type	Species	Time	Organ	Value	Result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	inhalation	-					May cause effects on the central nervous system.		high vapours concentrations
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	inhalation	-					Symptoms: nausea, unconsciousness.		high vapours concentrations
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	inhalation	-					Symptoms: mucous membrane irritation.		high vapours concentrations
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	inhalation	-					May cause respiratory irritation.		high vapours concentrations
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	oral	-					May cause irritation of the digestive tract.		
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	-	-					May cause drowsiness or dizziness.		
carbon dioxide (124-38-9)	inhalation	-	human				1 % CO <sub>2</sub> in the air: slight increase in breathing rate.		
carbon dioxide (124-38-9)	inhalation	-	human				2 % CO <sub>2</sub> in the air: a 50 % increase in breathing rate.		
carbon dioxide (124-38-9)	inhalation	-	human				3 % CO <sub>2</sub> in the air: a two-times increase in breathing rate, decreased hearing, headache, slight narcotic effect, increased blood pressure and pulse.		
carbon dioxide (124-38-9)	inhalation	-	human				4–5% concentration of CO <sub>2</sub> in the air: an increase in breathing rate by four times, symptoms of intoxication become noticeable, a choking feeling.		
carbon dioxide (124-38-9)	inhalation	-	human				5-10 % CO <sub>2</sub> in the air: headache, tinnitus and dizziness; after a few minutes - loss of consciousness.		
carbon dioxide (124-38-9)	inhalation	-	human				10-100 % CO <sub>2</sub> in the air: unconsciousness occurs rapidly at concentrations above 10%; it can be harmful or fatal.		

**Additional information:** May cause drowsiness or dizziness.

## (i) STOT-repeated exposure

**Additional information:** STOT RE (repeated exposure): Not classified.

## (j) Aspiration hazard

Name	Result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	Aspiration into the lungs can cause lung damage.		The exposed person should be kept under medical surveillance for 48 hours.
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	May be fatal if swallowed and enters airways.		

**Additional information:** May be fatal if swallowed and enters airways.

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## SECTION 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### 12.1.1. Acute (short-term) toxicity

##### For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
propan-2-ol (67-63-0)	LC <sub>50</sub> /EC <sub>50</sub> /IC <sub>50</sub>	100 – 1000 mg/L		fish			
	LC <sub>50</sub> /EC <sub>50</sub> /IC <sub>50</sub>	> 1000 mg/L		invertebrates			
	LC <sub>50</sub> /EC <sub>50</sub> /IC <sub>50</sub>	> 1000 mg/L		algae			
	LC <sub>50</sub> /EC <sub>50</sub> /IC <sub>50</sub>	> 1000 mg/L		bacteria			
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	ErL <sub>50</sub>	10 – 30 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	
	EbL <sub>50</sub>	10 – 30 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	
	EL <sub>50</sub>	3 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	
	LL <sub>50</sub>	> 13,4 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	OECD 203	
	NOELR	6,3 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	

#### 12.1.2. Chronic (long-term) toxicity

##### For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	NOELR	1 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 211	
	NOELR	1,53 mg/l	28 days	fish	<i>Oncorhynchus mykiss</i>	QSAR Petrotox	

### 12.2. Persistence and degradability

#### 12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information.

#### 12.2.2. Biodegradation

##### For components

Substance (CAS Nr.)	Type	Rate	Time	Evaluation	Method	Remark
propan-2-ol (67-63-0)	biodegradability	84 %	28 days			closed cup
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)	biodegradability	98 %	28 days	readily biodegradable	OECD 301 F	

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## 12.3. Bioaccumulative potential

### 12.3.1. Partition coefficient

#### For components

Substance (CAS Nr.)	Media	Value	Temperature	pH	Concentration	Method
propan-2-ol (67-63-0)	Octanol-water	0,05				

### 12.3.2. Bioconcentration factor (BCF)

No information.

## 12.4. Mobility in soil

### 12.4.1. Known or predicted distribution to environmental compartments

No information.

### 12.4.2. Surface tension

No information.

### 12.4.3. Adsorption/Desorption

No information.

## 12.5. Results of PBT and vPvB assessment

No evaluation.

## 12.6. Other adverse effects

No information.

## 12.7. Additional information

### For product

Toxic to aquatic life with long lasting effects.  
Water hazard class (WGK): 3 (Self-assessment), very hazardous for water.  
Do not allow to reach ground water, water courses or sewage system.

### For components

#### Substance: propan-2-ol

Low bioaccumulation potential.  
Soluble in water.  
It evaporates or dissolves in water within 24 hours. Larger amounts can penetrate the soil and pollute groundwater.

#### Substance: hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

#### Substance: carbon dioxide

When discharged in large quantities may contribute to the greenhouse effect (GWP=1).

## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### 13.1.1. Product / Packaging disposal

##### Waste chemical

Avoid release to the environment. Dispose of in accordance with applicable waste disposal regulation. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste. Product and container must be disposed of safely.

##### Waste codes / waste designations according to LoW

16 05 04\* - gases in pressure containers (including halons) containing dangerous substances

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## Packaging

Uncleaned containers should not be perforated, cut or welded. Pressurized container. Do not pierce or burn, even after use. Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities.

## Waste codes / waste designations according to LoW

15 01 11\* - metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

### 13.1.2. Waste treatment-relevant information

-

### 13.1.3. Sewage disposal-relevant information

-

### 13.1.4. Other disposal recommendations

-

## SECTION 14. TRANSPORT INFORMATION

### 14.1. UN number

UN 1950

### 14.2. UN proper shipping name

AEROSOLS

IMDG name: AEROSOLS (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)

### 14.3. Transport hazard class(es)

2

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

Additional labeling: ENVIRONMENTALLY HAZARDOUS

IMDG: MARINE POLLUTANT

### 14.6. Special precautions for user

#### Limited quantities

1 L

#### Tunnel restriction code

(D)

#### IMDG EmS

F-D, S-U

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

Goods may not be carried in bulk in bulk containers, containers or vehicles.



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## SECTION 15. REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

#### 15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

#### 15.1.2. Ingredients according to Regulation EC 648/2004 on detergents

≥ 30%: aliphatic hydrocarbons

### 15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16. OTHER INFORMATION

### Indication of changes

-

### Abbreviations and acronyms

ATE - Acute Toxicity Estimate  
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
CEN - European Committee for Standardisation  
C&L - Classification and Labelling  
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  
CAS# - Chemical Abstracts Service number  
CMR - Carcinogen, Mutagen, or Reproductive Toxicant  
CSA - Chemical Safety Assessment  
CSR - Chemical Safety Report  
DMEL - Derived Minimal Effect Level  
DNEL - Derived No Effect Level  
DPD - Dangerous Preparations Directive 1999/45/EC  
DSD - Dangerous Substances Directive 67/548/EEC  
DU - Downstream User  
EC - European Community  
ECHA - European Chemicals Agency  
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)  
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)  
EEC - European Economic Community  
EINECS - European Inventory of Existing Commercial Substances  
ELINCS - European List of notified Chemical Substances  
EN - European Standard  
EQS - Environmental Quality Standard  
EU - European Union  
Euphrac - European Phrase Catalogue  
EWC - European Waste Catalogue (replaced by LoW – see below)  
GES - Generic Exposure Scenario  
GHS - Globally Harmonized System  
IATA - International Air Transport Association  
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
IMDG - International Maritime Dangerous Goods  
IMSBC - International Maritime Solid Bulk Cargoes  
IT - Information Technology  
IUCLID - International Uniform Chemical Information Database

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IUPAC - International Union for Pure Applied Chemistry  
JRC - Joint Research Centre  
Kow - octanol-water partition coefficient  
LC<sub>50</sub> - Lethal Concentration to 50 % of a test population  
LD<sub>50</sub> - Lethal Dose to 50% of a test population (Median Lethal Dose)  
LE - Legal Entity  
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)  
LR - Lead Registrant  
M/I - Manufacturer / Importer  
MS - Member States  
MSDS - Material Safety Data Sheet  
OC - Operational Conditions  
OECD - Organization for Economic Co-operation and Development  
OEL - Occupational Exposure Limit  
OJ - Official Journal  
OR - Only Representative  
OSHA - European Agency for Safety and Health at work  
PBT - Persistent, Bioaccumulative and Toxic substance  
PEC - Predicted Effect Concentration  
PNEC(s) - Predicted No Effect Concentration(s)  
PPE - Personal Protection Equipment  
(Q)SAR - Qualitative Structure Activity Relationship  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
RIP - REACH Implementation Project  
RMM - Risk Management Measure  
SCBA - Self-Contained Breathing Apparatus  
SDS - Safety data sheet  
SIEF - Substance Information Exchange Forum  
SME - Small and Medium sized Enterprises  
STOT - Specific Target Organ Toxicity  
(STOT) RE - Repeated Exposure  
(STOT) SE - Single Exposure  
SVHC - Substances of Very High Concern  
UN - United Nations  
vPvB - Very Persistent and Very Bioaccumulative

## Key literature references and sources for data

-

## List of relevant H phrases

H225 Highly flammable liquid and vapour.  
H280 Contains gas under pressure; may explode if heated.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H361f Suspected of damaging fertility.  
H373 May cause damage to organs through prolonged or repeated exposure .  
H411 Toxic to aquatic life with long lasting effects.



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- Provided correct labelling of the product
- Compliance with the local legislation
- Provided correct classification of the product
- Provided adequate transport data

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The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.