SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

SCREEN WASH

Creation date	25th November 2022		
Revision date		Version	4.0

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

1.1. Product identifier

Substance / mixture	mixture
Number	R 34700
UFI	C533-R3AG-D00G-FA14

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

Mixture's intended use

Concentrated windscreen wash, for summer.

Mixture uses advised against

For professional use only.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name	RETECH, s.r.o.
Address	Vackova 1541/4, Praha 5 - Stodůlky, 155 00 Czech Republic
Identification number (CRN)	25018205
VAT Reg No	CZ25018205
Phone	+420327596428
E-mail	info@retech.cz
Web address	www.retech.com

Competent person responsible for the safety data sheet

Name	RETECH, s.r.o.
E-mail	info@retech.cz

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Skin Irrit. 2, H315
Eye Dam. 1, H318
Aquatic Chronic 3, H412

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse effects on human health and the environment

Causes serious eye damage. Causes skin irritation. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

Alcohols, C12-14, ethoxylated, sulfates, sodium salts
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts
2-aminoethanol

Hazard statements

H315 Causes skin irritation.

H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.
P501	Dispose of contents/container to in accordance with national regulations.

Supplemental information

EUH208	Contains (R) -p-mentha-1,8-dien. May produce an allergic reaction.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 603-027-00-1 CAS: 107-21-1 EC: 203-473-3 Registration number: 01-2119456816-28-0000	ethanediol	<10	Acute Tox. 4, H302 STOT RE 2, H373	1
CAS: 68891-38-3 EC: 500-234-8 Registration number: 01-2119488639-16-0000	Alcohols, C12-14, ethoxylated, sulfates, sodium salts	<10	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	
CAS: 68411-30-3 EC: 270-115-0 Registration number: 01-2119489428-22-0000	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts	4,6-5,7	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	
Index: 603-030-00-8 CAS: 141-43-5 EC: 205-483-3 Registration number: 01-2119486455-28-0000	2-aminoethanol	<4,1	Acute Tox. 4, H302+H312+H332 Skin Corr. 1B, H314 STOT SE 3, H335 Specific concentration limit: STOT SE 3, H335: C ≥ 5 %	1
Index: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 Registration number: 01-2119457892-27-0000	sodium hydroxide	<1,1	Met. Corr. 1, H290 Skin Corr. 1A, H314 Specific concentration limit: Skin Corr. 1B, H314: 2 % ≤ C < 5 % Skin Corr. 1A, H314: C ≥ 5 % Eye Irrit. 2, H319: 0,5 % ≤ C < 2 % Skin Irrit. 2, H315: 0,5 % ≤ C < 2 %	

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 601-029-00-7 CAS: 5989-27-5 EC: 227-813-5 Registration number: 01-2119529223-47-0000	(R)-p-mentha-1,8-diene	0,6-0,8	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	

Notes

1 A substance for which exposure limits are set.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. Do not eat, drink and smoke during work. Follow the usual measures for health protection at work. Take off contaminated clothing. And wash it before reuse.

If inhaled

Transfer the affected person to the fresh air and ensure calm environment for body and mind. Protect the person against growing cold.

If on skin

Remove contaminated clothes. Wash with plenty of soap and water.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Provide medical treatment, specialized if possible.

If swallowed

Rinse out the mouth with clean water. DO NOT INDUCE VOMITING! Do not provide anything by mouth if the person is unconscious or if having cramps. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free. Provide medical treatment.

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

If inhaled

not available

If on skin

Causes skin irritation.

If in eyes

Causes serious eye damage.

If swallowed

not available

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

Ingestion/eye contact: inform a doctor and show him information from this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Move containers from fire area if safe to do. Closed containers with the product near the fire should be cooled with water. Collect contaminated water used for firefighting separately. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Do not get in eyes, on skin, or on clothing. Provide sufficient ventilation. Keep unprotected persons away.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

6.3. Methods and material for containment and cleaning up

If possible, contain the spillage and pump off or remove the product mechanically or draw it off the water surface. Let absorb any residua or smaller quantities to a suitable sorbent (Vapex, Chezacarb, sand) and place it into labelled containers for further disposal in accordance with the relevant waste disposal legislation.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Do not inhale vapours. Observe valid legal regulations on safety and health protection. Ensure that eyewash stations and safety showers are close to the workstation location.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store together with food, drink and animal feed.

7.3. Specific end use(s)

See the Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

European Union **Commission Directive 2000/39/EC**

Substance name (component)	Type	Value	Note
ethanediol (CAS: 107-21-1)	OEL 8 hours	52 mg/m³	Skin
	OEL 8 hours	20 ppm	
	OEL 15 minutes	104 mg/m³	
	OEL 15 minutes	40 ppm	

European Union **Commission Directive 2006/15/EC**

Substance name (component)	Type	Value	Note
2-aminoethanol (CAS: 141-43-5)	OEL 8 hours	2,5 mg/m³	Skin
	OEL 8 hours	1 ppm	
	OEL 15 minutes	7,6 mg/m³	

European Union **Commission Directive 2006/15/EC**

Substance name (component)	Type	Value	Note
2-aminoethanol (CAS: 141-43-5)	OEL 15 minutes	3 ppm	Skin

DNEL

(R)-p-mentha-1,8-diene

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	9.5 mg/kg bw/day	Systemic chronic effects		
Workers	Inhalation	66.7 mg/m³	Systemic chronic effects		
Consumers	Dermal	4.8 mg/kg bw/day	Systemic chronic effects		
Consumers	Inhalation	16.6 mg/m³	Systemic chronic effects		
Consumers	Oral	4.8 mg/kg bw/day	Systemic chronic effects		

2-aminoethanol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	1 mg/m³	Systemic chronic effects		
Workers	Inhalation	0.51 mg/m³	Local chronic effects		
Workers	Dermal	3 mg/kg bw/day	Systemic chronic effects		
Consumers	Inhalation	0.18 mg/m³	Systemic chronic effects		
Consumers	Inhalation	0.28 mg/m³	Local chronic effects		
Consumers	Dermal	1.5 mg/kg bw/day	Systemic chronic effects		
Consumers	Oral	1.5 mg/kg bw/day	Systemic chronic effects		

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	175 mg/m³	Systemic chronic effects		
Workers	Dermal	2750 mg/kg bw/day	Systemic chronic effects		
Workers	Dermal	132 µg/cm²	Local chronic effects		
Consumers	Inhalation	52 mg/m³	Systemic chronic effects		
Consumers	Dermal	1650 mg/kg bw/day	Systemic chronic effects		
Consumers	Dermal	79 µg/cm²	Local chronic effects		
Consumers	Oral	15 mg/kg bw/day	Systemic chronic effects		

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	85 mg/kg bw/day	Systemic chronic effects		
Workers	Inhalation	6 mg/m³	Systemic chronic effects		
Consumers	Dermal	42.5 mg/kg bw/day	Systemic chronic effects		
Consumers	Inhalation	1.5 mg/m³	Systemic chronic effects		
Consumers	Oral	0.425 mg/kg bw/day	Systemic chronic effects		

ethanediol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	106 mg/kg bw/day	Systemic chronic effects		
Workers	Inhalation	35 mg/m³	Local chronic effects		
Consumers	Dermal	53 mg/kg bw/day	Systemic chronic effects		
Consumers	Inhalation	7 mg/m³	Local chronic effects		

sodium hydroxide

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	1 mg/m³	Local chronic effects		
Consumers	Inhalation	1 mg/m³	Local chronic effects		

PNEC

(R)-p-mentha-1,8-diene

Route of exposure	Value	Value determination	Source
Freshwater environment	14 µg/l		
Freshwater sediment	3.85 mg/kg of dry substance of sediment		
Soil (agricultural)	0.763 mg/kg of dry substance of soil		
Microorganisms in wastewater treatment plants	1.8 mg/l		
Seawater	1.4 µg/l		
Sea sediments	0.385 mg/kg of dry substance of sediment		
Food chain	133 mg/kg of food		

2-aminoethanol

Route of exposure	Value	Value determination	Source
Freshwater environment	0.07 mg/l		
Water (intermittent release)	0.028 mg/l		
Freshwater sediment	0.357 mg/kg of dry substance of sediment		
Soil (agricultural)	1.29 mg/kg of dry substance of soil		

2-aminoethanol

Route of exposure	Value	Value determination	Source
Microorganisms in wastewater treatment plants	100 mg/l		
Seawater	0.007 mg/l		
Sea sediments	0.036 mg/kg of dry substance of sediment		

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Route of exposure	Value	Value determination	Source
Freshwater environment	0.24 mg/l		
Seawater (intermittent release)	0.071 mg/l		
Freshwater sediment	0.917 mg/kg of dry substance of sediment		
Seawater	0.024 mg/l		
Sea sediments	0.092 mg/kg of dry substance of sediment		
Microorganisms in wastewater treatment plants	10 g/l		
Soil (agricultural)	7.5 mg/kg of dry substance of soil		

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Route of exposure	Value	Value determination	Source
Freshwater environment	0.268 mg/l		
Water (intermittent release)	0.017 mg/l		
Freshwater sediment	8.1 mg/kg of dry substance of sediment		
Soil (agricultural)	35 mg/kg of dry substance of soil		
Microorganisms in wastewater treatment plants	3.43 mg/l		
Seawater	0.027 mg/l		
Sea sediments	6.8 mg/kg of dry substance of sediment		

ethanediol

Route of exposure	Value	Value determination	Source
Freshwater environment	10 mg/l		
Water (intermittent release)	10 mg/l		
Freshwater sediment	37 mg/kg of dry substance of sediment		
Soil (agricultural)	1.53 mg/kg of dry substance of soil		
Seawater	1 mg/l		

ethanediol

Route of exposure	Value	Value determination	Source
Sea sediments	3.7 mg/kg of dry substance of sediment		
Microorganisms in wastewater treatment plants	199.5 mg/l		

8.2. Exposure controls

Follow the usual measures for health protection at work. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed). EN166 - Personal Eye Protection Standard.

Skin protection

Hand protection: Protective gloves resistant to the product. EN ISO 374-1. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Protective gloves shall be replaced immediately when damaged. Other protection: protective workwear and footwear.

Respiratory protection

Use a mask with filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. Filter A/P. EN143 - Respiratory protective devices - Gas filter(s) and combined filter(s).

Thermal hazard

Not available.

Environmental exposure controls

Avoid release to the environment. Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	yellow
Odour	containing alcohol
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	soluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	data not available

9.2. Other information

Evaporation rate	data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under normal conditions.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with acids.

10.4. Conditions to avoid

Protect against flames, sparks, overheating. Protect against strong acids and oxidizing agents.

10.5. Incompatible materials

Protect against strong acids and oxidizing agents.

10.6. Hazardous decomposition products

Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

(R)-p-mentha-1,8-diene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 423	>2000 mg/kg bw		Rat	
Dermal	LD_{50}	OECD 402	>5000 mg/kg bw		Rabbit	

2-aminoethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 401	1089 mg/kg bw		Rat	
Oral	LD_{50}	OECD 401	1.19 ml/kg bw		Rat	
Oral	LD_{50}	OECD 401	1.07 ml/kg bw		Rat	
Inhalation	LD_{50}		>1.3 mg/l of air		Rat	
Dermal	LD_{50}	OECD 402	≥2.46-≤2.83 ml/kg bw		Rabbit	
Dermal	LD_{50}	OECD 402	2504 mg/kg bw		Rabbit	
Dermal	LD_{50}	OECD 402	2881 mg/kg bw		Rabbit	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 401	4100 mg/kg bw		Rat	
Dermal	LD_{50}	OECD 402	>2000 mg/kg bw		Rat	
Oral	LD_{50}	OECD 401	2870 mg/kg bw		Rat	

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 401	1080 mg/kg bw		Rat	
Dermal	LD_{50}	OECD 402	>2000 mg/kg bw		Rat	

ethanediol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		8.54 mg/kg		Rat	
Dermal	LD_{50}		>3500 mg/kg		Mouse	
Inhalation	LC_{50}		>2.5 mg/l		Rat	

sodium hydroxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		500 mg/kg bw		Rabbit	

Skin corrosion/irritation

Causes skin irritation.

(R)-p-mentha-1,8-diene

Route of exposure	Result	Method	Exposure time	Species
Skin	Not irritating	OECD 404		Rabbit

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Route of exposure	Result	Method	Exposure time	Species
Dermal	Irritating	OECD 404		Rabbit

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Route of exposure	Result	Method	Exposure time	Species
Skin	Irritating	OECD 404		Rabbit

ethanediol

Route of exposure	Result	Method	Exposure time	Species
Dermal	Not irritating			Rabbit

Serious eye damage/irritation

Causes serious eye damage.

(R)-p-mentha-1,8-diene

Route of exposure	Result	Method	Exposure time	Species
Eye	Not irritating	OECD 405		Rabbit

2-aminoethanol

Route of exposure	Result	Method	Exposure time	Species
Eye	Serious eye damage	OECD 405		Rabbit
Skin	Corrosive	OECD 404		Rabbit

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Route of exposure	Result	Method	Exposure time	Species
Eye	Irritating	OECD 405		Rabbit

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Route of exposure	Result	Method	Exposure time	Species
Eye	Serious eye damage	OECD 405		Rabbit

ethanediol

Route of exposure	Result	Method	Exposure time	Species
Eye	Not irritating			Rabbit

sodium hydroxide

Route of exposure	Result	Method	Exposure time	Species
Eye	Irritating	OECD 405		Rabbit
Skin	Irritating			Human

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

(R)-p-mentha-1,8-diene

Route of exposure	Result	Method	Exposure time	Species	Sex
Skin	Sensitizing			Mouse	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Route of exposure	Result	Method	Exposure time	Species	Sex
Skin	Not sensitizing	OECD 406		Guinea-pig	

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Route of exposure	Result	Method	Exposure time	Species	Sex
Dermal	Not sensitizing	OECD 406		Guinea-pig	

ethanediol

Route of exposure	Result	Method	Exposure time	Species	Sex
Dermal	Not sensitizing			Guinea-pig	

Germ cell mutagenicity

Based on available data the classification criteria are not met.

2-aminoethanol

Result	Method	Exposure time	Specific target organ	Species	Sex
Negative	OECD 474			Mouse	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Result	Method	Exposure time	Specific target organ	Species	Sex
Negative	OECD 475			Mouse	

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Result	Method	Exposure time	Specific target organ	Species	Sex
Negative	OECD 474			Mouse	

ethanediol

Result	Method	Exposure time	Specific target organ	Species	Sex
Negative				Rat	

Carcinogenicity

Based on available data the classification criteria are not met.

(R)-p-mentha-1,8-diene

Route of exposure	Parameter	Method	Value	Result	Species	Sex
Oral	NOAEL	OECD 451	≥250-≤500 mg/kg bw/day		Mouse	
Oral	NOAEL	OECD 451	≥500-≤1000 mg/kg bw/day		Mouse	

ethanediol

Route of exposure	Parameter	Method	Value	Result	Species	Sex
Oral	NOAEL		1500 mg/kg bw/day		Mouse	

Reproductive toxicity

Based on available data the classification criteria are not met.

(R)-p-mentha-1,8-diene

Effect	Parameter	Method	Value	Result	Species	Sex
	NOAEL		500 mg/kg bw/day		Mouse	

2-aminoethanol

Effect	Parameter	Method	Value	Result	Species	Sex
	NOAEL	OECD 416	300 mg/kg bw/day		Rat	
	NOAEL	OECD 416	1000 mg/kg bw/day		Rat	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Effect	Parameter	Method	Value	Result	Species	Sex
	NOAEL	OECD 416	300 mg/kg bw/day		Rat	

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Effect	Parameter	Method	Value	Result	Species	Sex
	NOAEL		350 mg/kg bw/day		Rat	

ethanediol

Effect	Parameter	Method	Value	Result	Species	Sex
	NOAEL		>1000 mg/kg bw/day		Rat	

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

2-aminoethanol

Route of exposure	Parameter	Value	Result	Species	Sex
Inhalation			Irritating		

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

(R)-p-mentha-1,8-diene

Route of exposure	Parameter	Method	Value	Result	Species	Sex
Oral	NOAEL	OECD 407	825 mg/kg bw/day		Rat	
Oral	LOAEL	OECD 407	1650 mg/kg bw/day		Rat	

2-aminoethanol

Route of exposure	Parameter	Method	Value	Result	Species	Sex
Oral	NOAEL	OECD 416	300 mg/kg bw/day		Rat	
Inhalation	NOAEC	OECD 412	10 mg/m³ of air		Rat	
Inhalation	NOEC	OECD 412	150 mg/m³ of air		Rat	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Route of exposure	Parameter	Method	Value	Result	Species	Sex
Oral	NOAEL	OECD 408	>225 mg/kg bw/day		Rat	
Oral	LOAEL	OECD 408	25 mg/kg bw/day		Rat	
Dermal	NOEL	OECD 411	2.38 mg/kg		Rat	
Dermal	NOEL	OECD 411	68 mg/kg bw/day		Rat	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Route of exposure	Parameter	Method	Value	Result	Species	Sex
Dermal	NOEL	OECD 411	≥6.91 mg/kg bw/day		Rat	
Dermal	NOEL	OECD 411	≥195 mg/kg bw/day		Rat	

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Route of exposure	Parameter	Method	Value	Result	Species	Sex
Oral	LOAEL		300 mg/kg bw/day		Rat	
Oral	NOAEL		85 mg/kg bw/day		Rat	
Oral			145 mg/kg bw/day		Rat	

ethanediol

Route of exposure	Parameter	Method	Value	Result	Species	Sex
Dermal	NOAEL	OECD 410	2200-<4400 mg/kg bw/day		Dog	

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Harmful to aquatic life with long lasting effects.

(R)-p-mentha-1,8-diene

Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	OECD 203	0.72 mg/l		Fishes (Pimephales promelas)	
EC_{50}	OECD 203	0.688 mg/l		Fishes (Pimephales promelas)	
EC_{50}	OECD 202	0.307 mg/l	48 hour	Daphnia (Daphnia magna)	
EC_{50}	OECD 201	0.32 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
EC_{50}	OECD 201	0.214 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	

2-aminoethanol

Parameter	Method	Value	Exposure time	Species	Environment
LC 0		150 mg/l	96 hour	Fishes (Cyprinus carpio)	
LC_{50}		349 mg/l	96 hour	Fishes (Cyprinus carpio)	
LC 100		500 mg/l	96 hour	Fishes (Cyprinus carpio)	

2-aminoethanol

Parameter	Method	Value	Exposure time	Species	Environment
EC_{50}	OECD 202	27.04 mg/l	48 hour	Daphnia (Daphnia magna)	
EC_{50}	OECD 201	2.8 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
NOEC	OECD 201	1 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	

Alcohols, C12-14, ethoxylated, sulfates, sodium salts

Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	OECD 203	7.1 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC_{50}	OECD 202	7.4 mg/l	48 hour	Daphnia (Daphnia magna)	
EC_{50}	OECD 201	27.7 mg/l	72 hour	Algae (Desmodesmus subspicatus)	
EC 10	OECD 201	4.4 mg/l	72 hour	Algae (Desmodesmus subspicatus)	
NOEC	OECD 201	0.95 mg/l	72 hour	Algae (Desmodesmus subspicatus)	

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	OECD 203	2.88 mg/l	96 hour	Fishes (Pimephales promelas)	
EC_{50}	OECD 202	2.9 mg/l	48 hour	Daphnia (Daphnia magna)	
EC_{50}	OECD 202	6.4 mg/l	24 hour	Daphnia (Daphnia magna)	
EC_{50}		235 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
EC_{50}		13.1 mg/l	96 hour	Algae (Pseudokirchneriella subcapitata)	

ethanediol

Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		72860 mg/l	96 hour	Fishes (Pimephales promelas)	
EC_{50}	OECD 202	>100 mg/l	48 hour	Daphnia (Daphnia magna)	
IC_{50}		10940 mg/l	96 hour	Algae (Pseudokirchneriella subcapitata)	

sodium hydroxide

Parameter	Method	Value	Exposure time	Species	Environment
EC_{50}		40.4 mg/l	48 hour	Invertebrates (Ceriodaphnia sp.)	

12.2. Persistence and degradability

Data not available.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

16 10 03 aqueous concentrates containing hazardous substances *

Packaging waste type code

15 01 02 plastic packaging

15 01 10 packaging containing residues of or contaminated by hazardous substances *

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

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SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.

Guidelines for safe handling used in the safety data sheet

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face 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.
P310	Immediately call a doctor.
P302+P352	IF ON SKIN: Wash with plenty of water.
P501	Dispose of contents/container to in accordance with national regulations.

A list of additional standard phrases used in the safety data sheet

EUH208	Contains (R) -p-mentha-1,8-dien. May produce an allergic reaction.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC_{50}	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
EU	European Union
EuPCS	European Product Categorisation System

IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC_{50}	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Met. Corr.	Corrosive to metals
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 4.0 replaces the SDS version from 15 June 2018. Changes were made in sections 1, 2, 3, 8, 11, 12, 13, 15 and 16.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.