Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31, Annex II
according to Regulation (EU) No 2020/878

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

1.1 Product identifier

Trade name: Special foam extinguishing spray GLACI AID MG-400 MKII
UFI: NCYS-X06Y-C30M-T7EU

1.2 Relevant identified uses of the substance or mixture and uses advised against
No use descriptors (LCS, SU, PC, PROC, ERC, AC, TF categories) of the substance or mixture are available.

Application of the substance / the mixture:
The fire extinguishing spray is intended for extinguishing fires involving solid substances (class A), liquids (class B), gases up to a working pressure of 3 bar (class C), fats and oils (class F), devices under voltage up to 400 V and for extinguishing/suppressing fires involving lithium-ion accumulators and batteries. For fire class F and when extinguishing under voltage, the minimum distance for applying the extinguishing agent is 2 meters!

The contained fire extinguisher is EFFEM type - fire extinguisher without the content of regulated perfluorinated substances (Eco Friendly Fire Extinguishing Mixture without the content of regulated substances).
Fire extinguisher certificate from TÚPO Prague No. 221/003/2025.
Certificate of extinction of lithium-ion batteries from SZÚ Brno No. 39-153/11 2020.
Uses advised against: Any other than the above mentioned.

1.3 Details of the supplier of the safety data sheet
Supplier:
GLACI-AID s.r.o.
Příkop 6/838, 602 00 Brno, Czech Republic
Company registration number: 052 79 844
Phone: +420 607 551 085
E-mail: uher@glaciaid.com / Website: www.glaciaid.com

Further information obtainable from:
Ing. Karel Královec, Studio2K, Czech Republic
Phone: +420 777 145 808, Email: bl@studio2k.cz, Website: www.bezpecnostni-listy.eu

1.4 Emergency telephone number
European Chemicals Agency. National helpdesks contact details - https://echa.europa.eu/support/helpdesks.
Links to Poison Centers and Clinical Toxicologists all over the World: https://www.eapcct.org/index.php?page=links.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
The product is classified as dangerous in the terms of the Regulation (EC) No 1272/2008 (CLP).

Aerosol 3 H229 Pressurised container: May burst if heated.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation.
Hazard pictograms: Void.
Signal word: Warning

Hazard-determining components of labelling: Void.
Hazard statements:
H229 Pressurised container: May burst if heated.
Precautionary statements:
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Additional information:
EUH208 Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1). May produce an allergic reaction.

Classification system:
The product is intended for consumer and professional use, and this corresponds to its labeling on the packaging.

2.3 Other hazards Danger of explosion spray can when heated.

Results of PBT and vPvB assessment
PBT:
The mixture does not contain substances classified at the date of preparation of the safety data sheet as PBT according to Regulation (EC) No 1907/2006 (REACH) in a concentration equal to or greater than 0.1 % by weight.
vPvB:
The mixture does not contain substances classified at the date of preparation of the safety data sheet as vPvB according to Regulation (EC) No 1907/2006 (REACH) in a concentration equal to or greater than 0.1 % by weight.

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Determination of endocrine-disrupting properties
The mixture does not contain substances that have been identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 % by weight.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 142-31-4 EINECS: 205-535-5 REACH: 01-2119966154-35-XXXX	Sodium octyl sulphate Eye Dam. 1, H318 Skin Irrit. 2, H315 Specific concentration limits: Eye Dam. 1; H318: C ≥ 20 % Eye Irrit. 2; H319: 10 % ≤ C < 20 %	≤ 2.5%
CAS: 112-34-5 EINECS: 203-961-6 INDEX: 603-096-00-8 REACH: 01-2119475104-44-XXXX	2-(2-butoxyethoxy)ethanol Eye Irrit. 2, H319	≤ 2.5%
CAS: 64-17-5 EINECS: 200-578-6 INDEX: 603-002-00-5 REACH: 01-2119457610-43-XXXX	Ethanol Flam. Liq. 2, H225	< 1%
CAS: 55965-84-9 EC: 611-341-5 INDEX: 613-167-00-5	Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1) Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330 Skin Corr. 1C, H314; Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100) Skin Sens. 1A, H317 EUH071 Specific concentration limits: Skin Corr. 1C; H314: C ≥ 0.6 % Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 % Eye Dam. 1; H318: C ≥ 0.6 % Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 % Skin Sens. 1A; H317: C ≥ 0.0015 % Note B	< 0.0015%

Non dangerous components:		
CAS: 57-13-6 EINECS: 200-315-5	Urea	50 - 100%
CAS: 7732-18-5 EINECS: 231-791-2	Distilled water, demineralised	2.5 - 10%

Notes:
Note B:
Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations.
In Part 3 entries with Note B have a general designation of the following type: 'nitric acid .. %'.
In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

SVHC:
The product does not contain substances classified as of the date of preparation of the safety data sheet as PBT or vPvB and stated in the Candidate list of substances producing very high concerns for Appendix XIV of Regulation (EC) No 1907/2006 (REACH).

Regulation (EC) No 648/2004 on detergents / Labelling for contents: Not apply.

Additional information:
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3 of the Regulation (EC) No 1272/2008 (CLP Regulation) this means that all notes that may be given here for the named classification have been taken into account.
For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information:
In case of doubt, appearance of symptoms or upon any problems, seek medical help and present this safety data sheet or the product label.

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Never pour anything into the mouth of an unconscious person!
Personal protection for the First Aider.
After inhalation:
Inhalation exposure is improbable.
Remove person from danger area.
Lead the person to fresh air, put the person into a calm environment. In subsequent or continuing troubles, seek medical assistance.
After skin contact:
Generally the product does not irritate the skin.
Wash the affected skin with water and soap and rinse thoroughly. Upon skin irritation or other problems, consult further procedure with an expert physician.
After eye contact:
Open the eye lids, possibly remove contact lenses, and rinse the affected eyes thoroughly with clean flowing water for a period of several minutes. In case of eye irritation or other difficulties, consult further procedure with an ophthalmologist.
After swallowing:
Thoroughly rinse the mouth with water, do not give anything to drink and do not induce vomiting. Put the affected person in warm and calm conditions. Seek medical assistance immediately.
Information for doctor: Symptomatic treatment.

4.2 Most important symptoms and effects, both acute and delayed
Possible toxicological effects resulting from the classification are stated in Section 11.
Sensitive individuals:
Allergic reaction possible.

4.3 Indication of any immediate medical attention and special treatment needed
In case of ingestion seek medical help immediately.
For special medical advice, contact the Toxicology Information Centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Product itself is fire extinguishing agent.
For safety reasons unsuitable extinguishing agents: No extinguishing substances are determined, the mixture is not flammable.

5.2 Special hazards arising from the substance or mixture
No special dangers are determined.
The product itself is not flammable.
Danger of explosion when heated spray can.

5.3 Advice for firefighters
Protective equipment: No special measures required.
Additional information:
Cool with water the products in enclosed packaging, which is near the fire. If possible, remove the products in un-damaged packaging from the danger area. Store the contaminated extinguishing water separately and do not let it into the sewerage. Remove the extinguishing water or used extinguishing materials together with the remnants of the fire according to the corresponding regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Respect the instructions set forth in Sections 7 and 8 of the safety data sheet.
For non-emergency personnel:
Ensure adequate ventilation.
Use personal protective equipment.
Avoid contact with eyes and skin.
Prevent entry of unauthorised persons.
For emergency responders: See section 8 for suitable protective equipment and material specification.

6.2 Environmental precautions Product is not dangerous for nature or water.

6.3 Methods and material for containment and cleaning up
No special measures required.
Protect health against exposure of contained substances from the atmosphere, see the limit values of exposure, which are stated in Section 8.
Thoroughly wash the affected spot and the tools used with a suitable detergent, it is possible to use a larger quantity of water.
The further disposal procedure is governed by the regulations in Section 13.
Ensure adequate ventilation.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
In addition to the information provided in this section, important information is also provided in Sections 6 and 8.
Information about fire - and explosion protection:
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
Respect general regulations on fire prevention.
Handling:
Before use, it is necessary to familiarize oneself with the contents of Sections 2, 6, 8, and 11 of the safety data sheet.
Ensure good ventilation and exhaustion.
Use personal protective equipment.
Avoid contact with eyes and skin.
Observe directions on label and instructions for use.
General hygiene measures for the handing of chemicals are applicable.
Before a pause and after ending the work, wash the hands and take off the polluted working clothes. Keep these clothes separately.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.
Do not eat, drink, smoke, or snuff during use.

7.2 Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and receptacles:
Observe official regulations on storing packagings with pressurised containers.
Store only in unopened original receptacles.
Information about storage in one common storage facility:
Keep away from food, drink and animal feedingstuffs.
Store away from other chemical products.
Further information about storage conditions:
Store in a dry and well ventilated place.
Protect from heat and direct sunlight.
Shelf life: 72 months from production date.
Maximum storage temperature: +50 °C.

7.3 Specific end use(s) Specific use is stated in the manual for use on the product packaging label or in the product documentation.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
112-34-5 2-(2-butoxyethoxy)ethanol	
IOELV	Short-term value: 101.2 mg/m³, 15 ppm Long-term value: 67.5 mg/m³, 10 ppm

Regulatory information:
IOELV: COMMISSION DIRECTIVE (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.
BOELV: DIRECTIVE (EU) 2022/431 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2022 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40.

DNELs:		
57-13-6 Urea		
Oral	DNEL - Long term exposure, systemic effects	42 mg/kg/d (consumers)
	DNEL - Short term exposure, systemic effects	42 mg/kg/d (consumers)
Dermal	DNEL - Long term exposure, systemic effects	580 mg/kg/d (consumers)
		580 mg/kg/d (workers)
	DNEL - Short term exposure, systemic effects	580 mg/kg/d (consumers)
		580 mg/kg/d (workers)
Inhalative	DNEL - Long term exposure, systemic effects	125 mg/m3 (consumers)
		292 mg/m3 (workers)
	DNEL - Short term exposure, systemic effects	125 mg/m3 (consumers)
		292 mg/m3 (workers)
142-31-4 Sodium octyl sulphate		
Oral	DNEL - Long term exposure, systemic effects	24 mg/kg/d (consumers)

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Dermal	DNEL - Long term exposure, systemic effects	2,440 mg/kg/d (consumers)
		4,060 mg/kg/d (workers)
Inhalative	DNEL - Long term exposure, systemic effects	85 mg/m3 (consumers)
		285 mg/m3 (workers)
112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	DNEL - Long term exposure, systemic effects	200 mg/kg/d (consumers)
Dermal	DNEL - Long term exposure, systemic effects	50 mg/kg/d (consumers)
		83 mg/kg/d (workers)
Inhalative	DNEL - Long term exposure, systemic effects	40.5 mg/m3 (consumers)
		67.5 mg/m3 (workers)
	DNEL - Short term exposure, systemic effects	60.7 mg/m3 (consumers)
		101.2 mg/m3 (workers)
55965-84-9 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)		
Oral	DNEL - Long term exposure, systemic effects	0.09 mg/kg/d (consumers)
	DNEL - Short term exposure, systemic effects	0.11 mg/kg/d (consumers)
Inhalative	DNEL - Long term exposure, local effects	0.02 mg/m3 (consumers)
		0.02 mg/m3 (workers)
	DNEL - Short term exposure, local effects	0.04 mg/m3 (consumers)
		0.04 mg/m3 (workers)

PNECs:	
57-13-6 Urea	
PNEC - Freshwater	0.047 mg/l
142-31-4 Sodium octyl sulphate	
PNEC - Freshwater	0.1357 mg/l
PNEC - Marine water	0.01357 mg/l
PNEC - Sewage treatment plant	1.35 mg/l
PNEC - Sediment, freshwater	1.5 mg/kg
PNEC - Sediment, marine water	0.15 mg/kg
PNEC - Soil	0.22 mg/kg
112-34-5 2-(2-butoxyethoxy)ethanol	
PNEC - Freshwater	1.1 mg/l
PNEC - Marine water	0.11 mg/l
PNEC - Sewage treatment plant	200 mg/l
PNEC - Sediment, freshwater	4.4 mg/kg
PNEC - Sediment, marine water	0.44 mg/kg
PNEC - Soil	0.32 mg/kg
PNEC - Oral (animal feed)	56 mg/kg
55965-84-9 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	
PNEC - Freshwater	0.00339 mg/l
PNEC - Marine water	0.00339 mg/l
PNEC - Sewage treatment plant	0.23 mg/l
PNEC - Sediment, freshwater	0.027 mg/kg
PNEC - Sediment, marine water	0.027 mg/kg
PNEC - Soil	0.01 mg/kg
PNEC - Water (sporadic release)	0.00339 mg/l

Ingredients with biological limit values:
The product does not contain any relevant quantities of materials with biological limit values.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Appropriate engineering controls: No further data; see section 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.

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Do not eat, drink, smoke or sniff while working.
Immediately remove all soiled and contaminated clothing.
Do not inhale gases/fumes/aerosols.
Avoid contact with the eyes and skin.

Eye/face protection:
Not required during regular use.

In case of danger of contact with eyes, use tightly adhering protective goggles (EN 166).

Body protection:
Not required during regular use.
Alternatively, use light protective clothing.

Hand protection
Not required during regular use.

Use protective gloves whenever there is a risk of direct contact with hands (EN ISO 374-1).

Material of gloves:
Nitrile rubber gloves (EN ISO 374-1).
Recommended thickness of the material: ≥ 0.11 mm.
Glove material selection was performed based on the glove producers' data and information on substances contained in the product.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Penetration time of glove material:
≥ 480 minutes (EN 16523-1).
No tests have been performed, glove resistance must be tested before use.
The determined penetration times according to EN 16523-1 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50 % of the penetration time, is recommended.
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Other: Not determined.

Respiratory protection:
Unnecessary during regular use.

In case of insufficient ventilation and exceeding permitted exposure limits, use a suitable half-mask (EN 149+A1) with a filter (EN 14387+A1).

Observe wearing time limitations for respiratory protection equipment.
Recommended filter device for short term use: Filter A (EN 14387+A1), code colour brown.

Thermal hazards:
If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Environmental exposure controls: Adhere to usual measures for environmental protection, see Section 6.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information

Physical state:	Liquid (BOV spray, propellant is compressed clean air).
Colour:	Clear.
Odour:	Characteristic.
Melting point/freezing point:	-15 °C
Boiling point or initial boiling point and boiling range:	100 °C
Flammability:	It is not flammable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	Not determined.
pH:	Slightly alkaline

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Viscosity	
Kinematic viscosity:	Not determined.
Dynamic viscosity:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1.1 g/cm³
Vapour density:	Not determined.
Relative gas density:	Not determined.

9.2 Other information

Important information on protection of health and environment, and on safety.	
Ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Solvent content	
VOC (2010/75/EC):	Not apply.
Oxidising properties:	No.
Evaporation rate:	Not determined.
Relative evaporation rate:	Not apply.

Information with regard to physical hazard classes	
Explosives:	Void.
Flammable gases:	Void.
Aerosols:	Pressurised container: May burst if heated.
Oxidising gases:	Void.
Gases under pressure:	Void.
Flammable liquids:	Void.
Flammable solids:	Void.
Self-reactive substances and mixtures:	Void.
Pyrophoric liquids:	Void.
Pyrophoric solids:	Void.
Self-heating substances and mixtures:	Void.
Substances and mixtures, which emit flammable gases in contact with water:	Void.
Oxidising liquids:	Void.
Oxidising solids:	Void.
Organic peroxides:	Void.
Corrosive to metals:	Void.
Desensitised explosives:	Void.
Additional information:	No relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity Upon adhering to the determined regulations of storage and use, no reactivity is expected (see Section 7).
10.2 Chemical stability Upon adhering to the determined regulations of storage and use, the product is stable (see Section 7).
10.3 Possibility of hazardous reactions No dangerous reactions known.
10.4 Conditions to avoid
Temperature < -15 °C.
Prevent excessive heating by various heat sources above +50 °C. The growth of the pressure in the spray bottle leads to the danger of its bursting.
10.5 Incompatible materials No incompatible materials are known.
10.6 Hazardous decomposition products No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity: Based on available data, the classification criteria are not met.

Relevant toxicological values for classification:		
57-13-6 Urea		
Oral	LD50	14,300 mg/kg (rat)
142-31-4 Sodium octyl sulphate		
Oral	LD50	> 2,000 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rabbit)

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112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	LD50	5,660 mg/kg (rat)
Dermal	LD50	4,000 mg/kg (rabbit)
64-17-5 Ethanol		
Oral	LD50	> 6,200 mg/kg (rat)
Dermal	LD50	> 2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 8,000 mg/l (rat)
55965-84-9 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)		
Oral	LD50	53 mg/kg (rat)
Dermal	LD50	87 mg/kg (rabbit)
Inhalative	ATE	0.5 mg/l/4h (ATE)

Primary irritant effect

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

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

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

142-31-4 Sodium octyl sulphate		
Oral	NOAEL	488 mg/kg/d (rat) (OECD 408 - Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Dermal	NOAEL	400 mg/kg/d (mouse) (OECD 411 - Subchronic Dermal Toxicity - 90-Day Study)

Aspiration hazard: Based on available data, the classification criteria are not met.
Subacute to chronic toxicity: Based on available data, the classification criteria are not met.

Additional toxicological information: Allergic reaction possible through skin contact.

Acute effects: No acute effects are known.
Repeated dose toxicity: Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): No CMR effects are known.

11.2 Information on other hazards

Endocrine disrupting properties:
None of the ingredients is listed.

Other information: No other relevant information available on adverse effects on health.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
Based on available data, the classification criteria are not met.

57-13-6 Urea	
LC50/72 h	> 10,000 mg/l (bacteria) Pseudomonas putida
LC50/96 h	> 6,810 mg/l (fish) Leuciscus idus
EC50/48 h	> 10,000 mg/l (daphnia) Daphnia magna
142-31-4 Sodium octyl sulphate	
LC50/96 h	> 100 mg/l (fish) (OECD 203 - Fish, Acute Toxicity Test) Brachydanio rerio
EC50/48 h	> 100 mg/l (invertebrates) (OECD 202 - Daphnia sp. Acute Immobilisation Test) Daphnia magna

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EC50/72 h	> 511 mg/l (algae) (EU C.3 (92/69/EEC)) Desmodesmus subspicatus
NOEC/42 d	≥ 1.357 mg/l (fish) Pimephales promelas
NOEC/21 d	1.4 mg/l (invertebrates) (OECD 211 - Daphnia magna Reproduction Test) Daphnia magna
112-34-5 2-(2-butoxyethoxy)ethanol	
LC50/96 h	1,300 mg/l (fish)
EC50/48 h	2,850 mg/l (daphnia)
IC50/72 h	73 mg/l (algae)
64-17-5 Ethanol	
LC50/48 h	> 14,221 mg/l (daphnia) Daphnia magna
	> 8,140 mg/l (fish) Leuciscus idus
LC50	> 5,000 mg/l (algae) Scenedesmus quadricauda
55965-84-9 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	
LC50/96 h	0.19 mg/l (fish) Oncorhynchus mykiss
EC50/48 h	0.16 mg/l (daphnia) Daphnia magna
EC50/72 h	> 0.037 mg/l (algae) Pseudokerchneriella subcapitata
EC50/16 h	5.7 mg/l (bacteria) Pseudomonas putida

12.2 Persistence and degradability	
142-31-4 Sodium octyl sulphate	
Biodegradability, aerobic	93.5 %/29 d (OECD 301 B - Ready Biodegradability - CO2 Evolution Test) the substance is readily biodegradable
55965-84-9 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	
Biodegradability in water	< 50 %/10 d the substance is not readily biodegradable

Behaviour in waste water treatment plants: No relevant information is available.

12.3 Bioaccumulative potential	
142-31-4 Sodium octyl sulphate	
log Pow	≤ -2.31 (OECD 107 - Partition Coefficient (n-octanol/water)) bioaccumulation is not expected
112-34-5 2-(2-butoxyethoxy)ethanol	
log Pow	0.56 (při 25 °C) bioaccumulation is not expected
64-17-5 Ethanol	
log Pow	-0.349 (24 °C) bioaccumulation is not expected
55965-84-9 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	
log Pow	0.401 measured value, bioaccumulation is not expected

Bioconcentration factor (BCF):	
55965-84-9 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	
BCF	3.6 calculated value

12.4 Mobility in soil	
55965-84-9 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	
log Koc	28 estimated value

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12.5 Results of PBT and vPvB assessment
The product does not contain substances classified as PBT or vPvB and included in the list of substances subject to authorization (Annex XIV of EP and R Regulation No 1907/2006, as amended).
PBT: No relevant information is available.
vPvB: No relevant information is available.

12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects No information available on other adverse effects on the environment.

Additional ecological information

COD-value:	
64-17-5 Ethanol	
COD	1.9 g O2/g

BOD5-value:	
64-17-5 Ethanol	
BOD5	1 g O2/g

AOX-indication: No relevant information is available.

General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation:
Product residues are not hazardous waste.
The product can be discharged into the waste or sewage system.
Remove product residues according to the corresponding local directives as other waste.
Alternatively, dispose of product residues in accordance with relevant local guidelines in appropriate facilities.
Waste disposal key:
The catalogue numbers with the asterisk (*) mark hazardous waste (N), numbers without the asterisk mark other waste (O).
The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC, 2014/955/EU).

European waste catalogue and hazardous properties of waste:	
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
15 01 11*	metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers
15 01 04	metallic packaging

Uncleaned packaging
Recommendation:
Dispose of packaging according to regulations on the disposal of packagings.
Completely empty the pressure bottles (including the propelling gas).
Do not open by force or incinerate empty pressure bottles after use.
Take full aerosol cans to problem waste collection.
Handover the emptied packaging to the authorised organisation, which has a licence for their disposal.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

Regulations:
Commission Decision No 2014/955/EU of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council.
Commission Regulation (EU) No 1357/2014, replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives.
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, as amended.

SECTION 14: Transport information

14.1 UN number or ID number
ADR, IMDG, IATA UN1950
14.2 UN proper shipping name
ADR 1950 AEROSOLS
IMDG AEROSOLS
IATA AEROSOLS, non-flammable

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14.3 Transport hazard class(es)

ADR

Class:	2 5A Gases.
Label:	2.2

IMDG, IATA

Class:	2.2 Gases.
Label	2.2
14.4 Packing group	
ADR, IMDG, IATA	Void.
14.5 Environmental hazards	
Marine pollutant:	No
14.6 Special precautions for user	Persons employed in transporting dangerous goods must be trained. All persons involved in transporting must observe safety regulations. Precautions must be taken to prevent damage. Warning: Gases.
Hazard identification number (Kemler code):	-
EMS Number:	F-D,S-U
Stowage Code:	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
Segregation Code:	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
14.7 Maritime transport in bulk according to IMO instruments	Freighted as packaged goods rather than in bulk, therefore not applicable. Minimum amount regulations have not been taken into account.
Transport/Additional information:	Danger code and packing code on request.

ADR

Limited quantities (LQ):	1L
Excepted quantities (EQ):	Code: E0 Not permitted as Excepted Quantity
Transport category:	3
Tunnel restriction code:	E

IMDG

Limited quantities (LQ):	1L
Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity.
UN "Model Regulation":	UN 1950 AEROSOLS, 2.2

* SECTION 15: Regulatory information

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

Directive 2004/42/EC of the European Parliament and the Council: Does not apply.
Named dangerous substances - ANNEX I: None of the ingredients is listed.
REGULATION (EC) No 1907/2006 ANNEX XVII: Conditions of restriction for the group No 3.

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DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II:
None of the ingredients is listed.

Legal regulations of the European Community:
Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR), applicable as from 1 January 2025.
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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 16 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.
COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC, as amended.
COMMISSION REGULATION (EU) amending for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures:
2016/918 (8. ATP from 1.2.2018), 2016/1179 (9. ATP from 1.3.2018), 2017/776 (10. ATP from 1.12.2018), 2018/669 (11. ATP from 1.12.2019), 2019/521 (12. ATP from 17.10.2020), 2018/1480 (13. ATP from 1.5.2020).
COMMISSION DELEGATED REGULATION (EU) amending for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures:
2020/217 (14. ATP from 1.10.2021), 2020/1182 (15. ATP from 1.3.2022), 2021/643 (16. ATP from 10.5.2021), 2021/849 (17. ATP from 17.12.2022), 2022/692 (18. ATP from 1.12.2023), 2023/1434 (19. ATP from 1.8.2023).

15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

* SECTION 16: Other information

Warning:
The safety data sheet contains data needed for securing safety and health protection during work and environ-mental protection. The stated data correspond to the current state of knowledge and experience and is in accord-ance with valid legal regulations. It cannot be deemed as a guarantee of the properties, suitability, and usefulness of the product for specific application and therefore no contractual legal relationships are hereby created.
The safety data sheet is the property of the physical or legal entity stated in Section 1 and is protected by copy-right. All copying, distribution or sales without the consent of the owner is forbidden.

Relevant phrases:
H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H310 Fatal in contact with skin.
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.
H330 Fatal if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

Training hints: Before using, read the information on the product's packaging carefully.

Recommended restriction of use:
The product is to be used only for the purpose, for which it is designed. It is up to the user's responsibility to ad-here to the product usage conditions and to respect the safety instructions for health and environmental protection.

Further information:
This product must be stored, sold, and used in accordance with valid hygienic regulations.
Standard packaging: 400 ml aluminium spray can of the BOV system.

Classification according to Regulation (EC) No 1272/2008:	
Aerosols, Section 2.3.1	Bridging principles

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First issue of SDS: 12.10.2016

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Version number of previous version: 5
Reasons for alterations: Revision of the safety data sheet due to changes or additions to some data and information.
Revised sections: 1, 15, 16.
Internal code formula: 1050.002

Documents used to prepare SDS:
The original documents provided by the supplier or manufacturer related to the product (mixture), eventually to individual substances contained.

Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Aerosol 3: Aerosols – Category 3
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1A: Skin sensitisation – Category 1A
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Information on data sources used in compiling the safety data sheet:
The safety data sheet was prepared in accordance with the European Parliament and Council Regulation (EC) No 1272/2008 (CLP) and according to the requirements of the European Parliament and Council Regulation (EC) No 1907/2006 about the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency - head IV, article 31, appendix II (instructions for safety data sheet compiling), as amended by the Commission Regulation (EU) No 2020/878 of 18 June 2020.
The missing ecotoxicology and toxicology data was obtained from the ESIS (European chemical Substances Information System), specifically from the IUCLID (International Uniform ChemicaL Information Database). As needed, data from further available chemical databases was used.

*** Data compared to the previous version altered.**

End of safety data sheet!