

GENERAL PURPOSE

Version number: GHS 3.0
Replaces version of: 2021-09-22

Date of compilation: 2019-08-06
Revision: 2025-03-11

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

1.1 Product identifier

Trade name	GENERAL PURPOSE
UFI	N600-10EY-S00C-572C
Code	GP
EDP number	000-020-104

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

Relevant identified uses	Detergent for ultrasonic cleaning PC35: Washing and cleaning products professional use industrial use
Uses advised against	Other non-specified industry.

1.3 Details of the supplier of the safety data sheet

Branson Ultrasonic SARL
9, Ch. Faubourg-de-Cruseilles
CH-1227 Carouge/Geneva
Switzerland

Telephone: +41 (0) 22 304 8340
Website: www.BransonUltrasonics.com

e-mail (competent person)

cleaning.bransonch@emerson.com

1.4 Emergency telephone number

Emergency information service	Natioanl Poisons Information Service (NPIS) In England and Wales: NHS 111 - dial 111 In Scotland: NHS 24 - dial 111 In N Ireland: Contact your local GP or phamacist during normal hours: click here (www.gpoutofhour.hscni.net/) for GP services Out-of-Hours. In Republic of Ireland: 01 809 2166
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.16	substance or mixture corrosive to metals	1	Met. Corr. 1	H290
3.2	skin corrosion/irritation	1B	Skin Corr. 1B	H314
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

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2.2 Label elements

Labelling

- Signal word danger

- Pictograms

GHS05



- Hazard statements

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

- Precautionary statements

P260

Do not breathe vapours/spray.

P280

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

P301+P330+P331

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338

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

- Hazardous ingredients for labelling

disodium metasilicate, Isotridecanol, ethoxylated

2.3 Other hazards

The material causes defatting of the skin. Prevent absorption of 2-butoxyethanol by the skin.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Endocrine disrupting properties




Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Name of substance	Identifier	Wt%	Classification acc. to 1272/2008/EC	Pictograms	Notes
disodium metasilicate	CAS No 6834-92-0 EC No 229-912-9 Index No 014-010-00-8	5 - < 10	Met. Corr. 1 / H290 Skin Corr. 1B / H314 Eye Dam. 1 / H318 STOT SE 3 / H335	 	
2-butoxyethanol	CAS No 111-76-2 EC No 203-905-0 Index No 603-014-00-0	5 - < 10	Acute Tox. 4 / H302 Acute Tox. 3 / H331 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319		IOELV

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Name of substance	Identifier	Wt%	Classification acc. to 1272/2008/EC	Pictograms	Notes
Isotridecanol,ethoxylated	EC No 931-138-8	1 - < 3	Acute Tox. 4 / H302 Eye Dam. 1 / H318		

Notes

IOELV: Substance with a community indicative occupational exposure limit value

Hazardous ingredients: Concentration limit, M-Factor, ATE

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
disodium metasilicate	-	-	770 mg/kg >2.06 mg/l/4h 0.5 mg/l/4h	oral inhalation: vapour inhalation: dust/mist
2-butoxyethanol	-	-	1,200 mg/kg 3 mg/l/4h	oral inhalation: vapour
Isotridecanol,ethoxylated	-	-	500 mg/kg	oral

Remarks

For full text of abbreviations: see SECTION 16

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). Substance is harmful to tissue after continuous contact. Rinsing immediately following exposure can limit injury.

Following inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact

Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

If you use contact lenses remove them if it is possible. Hold the eyelids open and rinse with plenty of water for at least 15 minutes. Immediately seek medical help of an ophthalmologist.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Effects on the eyes: Corrosive, redness, pain, impaired vision, lacrimation, damage to the cornea.

Effects on the skin: Irritation, redness, pain, burns. Skin contact may cause defatting of the skin and result in contact dermatitis and absorption through the skin. Contains 2-butoxyethanol which may be absorbed through the skin. There is also a risk of chemical burns in case of skin contact.

Ingestion: Corrosive: blisters on the lips and in the mouth, abdominal pain, stomach cramps, nausea and vomiting, bloody vomit and/or diarrhoea, severe blood pressure drop, unconsciousness. The substance can have effects on the central nervous system, the breakdown of red blood cells, the kidneys and the liver.

Effects on (inhalation) the respiratory organs: Irritation, sore throat and coughing, dizziness, drowsiness, shortness of breath, difficulty breathing, sleepiness, unconsciousness. Inhalation of high concentrations may cause lung oedema, but only after initial corrosive effects on the mucous membranes of the eyes and/or upper airways have become manifest.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures**5.1 Extinguishing media**

Match extinguishing measures to surroundings.

Suitable extinguishing media

Water spray, alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO₂), sand.

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Special fire hazards: contains components which may form explosive mixtures (peroxides) with air at temperatures above 61 °C. Reacts with strong oxidants, halogens and acids, causing fire and explosion hazard. In case of fire, hazardous and toxic vapours may be released.

Hazardous combustion products

May produce toxic fumes of carbon monoxide if burning, carbon monoxide (CO), carbon dioxide (CO₂), sulphur dioxide (SO₂).

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance. Fire fighting crew should be adequately trained and equipped with self-contained breathing apparatus and full protective clothing. Cool closed containers exposed to fire with water spray. Common protective equipment for firefighters in chemical extinguishing, self-contained breathing apparatus and protective clothing.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Eliminate all sources of ignition. Ventilate affected area. Use appropriate protective equipment (including personal protective equipment listed in Section 8 of the safety data sheet) to avoid any contamination of skin, eyes and personal clothing. Special danger of slipping by leaking/spilling product.

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. Collect contaminated soil and dispose of it.

6.3 Methods and material for containment and cleaning up**Advice on how to contain a spill**

Covering of drains

Advice on how to clean up a spill

Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder.

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Instructions for handling and storage: see section 7. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Follow the general principles of occupational health and safety with chemicals. Prevent skin contact. Avoid breathing fume/mist/vapours/spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Ensure adequate ventilation.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in the original container in a cool, well-ventilated place. Keep container tightly closed. Protect against frost, fire and direct sunlight. Suitable packaging material: Polyethylene, stainless steel, PVC. Packaging material, unsuitable: Aluminium, zinc, tin.

Information about storage in one common storage facility: Store separately from acids. Install partitions in the drip tray to prevent acidic and alkaline substances from coming into contact with one another.

Further information about storage conditions: Recommended storage temperature 20 ± 10 °C.

7.3 Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of substance	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Notation	Source
EU	2-butoxyethanol	111-76-2	IOELV	20	98	50	246	H	2000/39/E C
GB	2-butoxyethanol	111-76-2	WEL	25	123	50	246	H	EH40/2005

Notation

H absorbed through the skin

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Biological limit values

Biological limit values						
Country	Name of agent	Parameter	Notation	Identifier	Value	Source
GB	2-butoxyethanol	2-butoxyacetic acid	crea	BMGV	240 mmol/mol	EH40/2005

Notation

crea creatinine

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Relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
disodium metasilicate	6834-92-0	DNEL	0.74 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
disodium metasilicate	6834-92-0	DNEL	1.49 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
disodium metasilicate	6834-92-0	DNEL	6.22 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
disodium metasilicate	6834-92-0	DNEL	1.55 mg/m ³	human, inhalatory	consumer (private households)	chronic - systemic effects
disodium metasilicate	6834-92-0	DNEL	0.74 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
2-butoxyethanol	111-76-2	DNEL	125 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2-butoxyethanol	111-76-2	DNEL	89 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
2-butoxyethanol	111-76-2	DNEL	38 mg/m ³	human, dermal	consumer (private households)	chronic - systemic effects
2-butoxyethanol	111-76-2	DNEL	44.5 mg/cm ³	human, dermal	consumer (private households)	acute - systemic effects
2-butoxyethanol	111-76-2	DNEL	98 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
2-butoxyethanol	111-76-2	DNEL	1,091 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
2-butoxyethanol	111-76-2	DNEL	246 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
2-butoxyethanol	111-76-2	DNEL	59 mg/m ³	human, inhalatory	consumer (private households)	chronic - systemic effects
2-butoxyethanol	111-76-2	DNEL	426 mg/m ³	human, inhalatory	consumer (private households)	acute - systemic effects
2-butoxyethanol	111-76-2	DNEL	147 mg/m ³	human, inhalatory	consumer (private households)	acute - local effects
2-butoxyethanol	111-76-2	DNEL	6.3 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
2-butoxyethanol	111-76-2	DNEL	26.7 mg/kg bw/day	human, oral	consumer (private households)	acute - systemic effects
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	175 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	2,750 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	132 µg/cm ²	human, dermal	worker (industry)	chronic - local effects
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	52 mg/m ³	human, inhalatory	consumer (private households)	chronic - systemic effects
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	1,650 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects

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Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	79 µg/cm ²	human, dermal	consumer (private households)	chronic - local effects
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	15 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
disodium metasilicate	6834-92-0	PNEC	7.5 g/ml	not specified	freshwater	not specified
disodium metasilicate	6834-92-0	PNEC	7.5 mg/cm ³	not specified	freshwater	intermittent release
disodium metasilicate	6834-92-0	PNEC	1 mg/cm ³	not specified	marine water	not specified
disodium metasilicate	6834-92-0	PNEC	1,000 mg/cm ³	not specified	sewage treatment plant (STP)	not specified
2-butoxyethanol	111-76-2	PNEC	9.1 mg/cm ³	aquatic organisms	freshwater	intermittent release
2-butoxyethanol	111-76-2	PNEC	8.8 mg/l	aquatic organisms	freshwater	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	0.88 mg/l	aquatic organisms	marine water	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	463 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	34.6 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	3.46 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	2.33 mg/kg	terrestrial organisms	soil	short-term (single instance)
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	0.24 mg/l	aquatic organisms	freshwater	short-term (single instance)
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	0.024 mg/l	aquatic organisms	marine water	short-term (single instance)
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	10 g/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	0.917 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	0.092 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	7.5 mg/kg	terrestrial organisms	soil	short-term (single instance)

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8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Use personal protective equipment with CE marking.

Eye/face protection

Use safety glasses with side protection shield (EN 166). Use protective eyewear to guard against splash of liquids. Provide eye wash fountain in work area

Skin protection

Wear suitable protective clothing (overalls, preferably thick cotton or disposable protective suit).

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Protective gloves should be replaced immediately if damaged or in case of signs of wear.

- Type of material

In the case of longer contact protective gloves made from butyl rubber are recommended according to EN 374.

- Other protection measures

Wash hands thoroughly after handling.

Respiratory protection

Adequate ventilation (ventilation factor > 1), if possible supplemented by local exhaust ventilation. If the limit value at the workplace cannot be satisfied based on engineering measures, a combination filter must be worn during short exposure.

Thermal hazards

No data available.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state	liquid
Colour	clear, colorless
Odour	aromatic
Melting point/freezing point	-7 °C
Boiling point or initial boiling point and boiling range	100 °C
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	information on this property is not available
Flash point	>62 °C
Auto-ignition temperature	230 °C
Decomposition temperature	not relevant
pH (value)	12.5 (base)

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Kinematic viscosity	not determined
Solubility(ies)	
Water solubility	miscible in any proportion
Partition coefficient	
Partition coefficient n-octanol/water (log value)	this information is not available
Vapour pressure	
Vapour pressure	0.8 hPa at 20 °C
Density and/or relative density	
Density	not determined
Relative vapour density	information on this property is not available
Relative density	1.06 (water = 1)
Particle characteristics	
Particle characteristics	not relevant (liquid)
Other safety parameters	
Explosive properties	contains 2-butoxyethanol which is explosive 1,1 - 10,6% (V) in combination with air

9.2 Other information

VOC: 54 g/l.

SECTION 10: Stability and reactivity**10.1 Reactivity**

This material is not reactive under normal ambient conditions. Substance or mixture corrosive to metals.

10.2 Chemical stability

The product is stable if stored and handled as prescribed. No decomposition if used as prescribed. Avoid storing at high temperatures (> 30 °C) to prevent degradation of the material or pressure build-up. Avoid high (> 80 °C) and low (< 10 °C) temperatures. Material is susceptible to frost.

10.3 Possibility of hazardous reactions

Strong acids.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from open fire, heat and direct sunlight. Protect from frost.

10.5 Incompatible materials

Mildly corrosive for metals, halogens, aluminium, zinc, copper, tin (and alloys), acids, oxidisers.

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10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

- Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	ATE
disodium metasilicate	6834-92-0	oral	770 mg/kg
disodium metasilicate	6834-92-0	inhalation: vapour	>2.06 mg/l/4h
disodium metasilicate	6834-92-0	inhalation: dust/mist	0.5 mg/l/4h
2-butoxyethanol	111-76-2	oral	1,200 mg/kg
2-butoxyethanol	111-76-2	inhalation: vapour	3 mg/l/4h
Isotridecanol,ethoxylated		oral	500 mg/kg

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
disodium metasilicate	6834-92-0	oral	LD50	770 – 820 mg/kg	mouse
disodium metasilicate	6834-92-0	inhalation: vapour	LC50	>2.06 mg/l/4h	rat
disodium metasilicate	6834-92-0	dermal	LD50	>5,000 mg/kg	rat
2-butoxyethanol	111-76-2	dermal	LD50	>2,000 mg/kg	rat
2-butoxyethanol	111-76-2	oral	LD50	1,414 mg/kg	guinea pig
Isotridecanol,ethoxylated		oral	LD50	300 – 2,000 mg/kg	rat
Isotridecanol,ethoxylated		dermal	LD50	>2,000 mg/kg	rabbit
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	oral	LD50	4,100 mg/kg	rat
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	dermal	LD50	>2,000 mg/kg	rat

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

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Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.
Alcohols, C12-14, ethoxylated, sulfates, sodium salts:
NOAEL >300 mg/kg, Oral, Rat OECD 416
NOAEL: >1000 mg/kg, Oral, Rat OECD 414.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).
Alcohols, C12-14, ethoxylated, sulfates, sodium salts:
NOAEL >225 mg/kg, Oral, Rat OECD 408.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information**12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
disodium metasilicate	6834-92-0	LC50	310 mg/l	fish	96 h
disodium metasilicate	6834-92-0	EC50	1,700 mg/l	aquatic invertebrates	48 h
disodium metasilicate	6834-92-0	EC50	207 mg/l	algae	72 h
2-butoxyethanol	111-76-2	LC50	1,474 mg/l	fish	96 h
2-butoxyethanol	111-76-2	EC50	1,550 mg/l	aquatic invertebrates	48 h
2-butoxyethanol	111-76-2	ErC50	1,840 mg/l	algae	72 h
2-butoxyethanol	111-76-2	NOEC	88 mg/l	algae	72 h
2-butoxyethanol	111-76-2	growth (EbCx) 10%	308 mg/l	algae	72 h
2-butoxyethanol	111-76-2	growth rate (ErCx) 10%	679 mg/l	algae	72 h
Isotridecanol,ethoxylated		LC50	1 – 10 mg/l	fish	96 h
Isotridecanol,ethoxylated		EC50	1 – 10 mg/l	daphnia magna	48 h
Isotridecanol,ethoxylated		EC50	1 – 10 mg/l	algae	72 h
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	LC50	7.1 mg/l	fish	96 h
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	EC50	7.4 mg/l	aquatic invertebrates	48 h
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	ErC50	27.7 mg/l	algae	72 h

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	NOEC	0.95 mg/l	algae	72 h
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	growth rate (ErCx) 10%	4.4 mg/l	algae	72 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
disodium metasilicate	6834-92-0	EC50	>100 mg/l	microorganisms	3 h
2-butoxyethanol	111-76-2	EC50	297 mg/l	aquatic invertebrates	21 d
2-butoxyethanol	111-76-2	NOEC	100 mg/l	aquatic invertebrates	21 d
2-butoxyethanol	111-76-2	growth (EbCx) 10%	134 mg/l	aquatic invertebrates	21 d
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	EC50	0.63 mg/l	fish	28 d
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	LC50	1.05 mg/l	fish	45 d
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	NOEC	0.14 mg/l	fish	28 d
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	LOEC	0.33 mg/l	aquatic invertebrates	21 d
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	growth (EbCx) 10%	0.28 mg/l	fish	28 d

12.2 Persistence and degradability

Partially inorganic and partially biodegradable over the long-term.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

The ingredients in the mixture do not meet the criteria for PBT or vPvB in accordance with Annex XII of REACH.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container to a facility in accordance with local and national regulations.
 EC Regulation for Disposal of Waste (EWC):
 06 02 05 WASTES FOR INORGANIC CHEMICAL PROCESSES, wastes from the MFSU of bases, other bases; wastes containing dangerous substances.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID	UN 1719
IMDG-Code	UN 1719
ICAO-TI	UN 1719

14.2 UN proper shipping name

ADR/RID	CAUSTIC ALKALI LIQUID, N.O.S.
IMDG-Code	CAUSTIC ALKALI LIQUID, N.O.S.
ICAO-TI	Caustic alkali liquid, n.o.s.
Technical name (hazardous ingredients)	disodium metasilicate

14.3 Transport hazard class(es)

ADR/RID	8
IMDG-Code	8
ICAO-TI	8

14.4 Packing group

ADR/RID	II
IMDG-Code	II
ICAO-TI	II

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

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Information for each of the UN Model Regulations**Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information**

Classification code C5
Danger label(s) 8



Special provisions (SP) 274
Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L
Transport category (TC) 2
Tunnel restriction code (TRC) E
Hazard identification No 80
Emergency Action Code 2R

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information

Classification code C5
Danger label(s) 8



Special provisions (SP) 274
Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L
Transport category (TC) 2
Hazard identification No 80

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant -
Danger label(s) 8



Special provisions (SP) 274
Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L
EmS F-A, S-B
Stowage category A
Segregation group 18 - Alkalis

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International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s)	8
	
Special provisions (SP)	A3
Excepted quantities (EQ)	E2
Limited quantities (LQ)	0,5 L

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Regulation of the European Parliament and of the Council (EC) No. 1907/2006 (REACH) as amended,
Regulation of the European Parliament and of the Council (EC) No. 1272/2008 (CLP) as amended.

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Water Framework Directive (WFD)

Name of substance	CAS No	Listed in	Remarks
disodium metasilicate		a)	

Legend

a) Indicative list of the main pollutants

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

National regulations (GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

none of the ingredients are listed

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
GENERAL PURPOSE	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3

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National inventories

Country	Inventory	Status
EU	REACH Reg.	not all ingredients are listed

Legend

REACH Reg. REACH registered substances

15.2 Chemical safety assessment

A chemical safety assessment has been performed for substances with a REACH registration number.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Formal and textual modifications.

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1		UFI: N600-10EY-S00C-572C	yes
1.1		Code: GP	yes
1.1		EDP number: 000-020-104	yes
8.1		Relevant DNELs of components of the mixture: change in the listing (table)	yes
8.1		Relevant PNECs of components of the mixture: change in the listing (table)	yes
11.1		Acute toxicity of components of the mixture: change in the listing (table)	yes
11.1	Respiratory or skin sensitisation: Contains . May produce an allergic reaction.	Respiratory or skin sensitisation: Shall not be classified as a respiratory or skin sensitiser.	yes
12.1		Aquatic toxicity (acute) of components of the mixture: change in the listing (table)	yes
12.1		Aquatic toxicity (chronic) of components of the mixture: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC
Acute Tox.	Acute toxicity
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)

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Abbr.	Descriptions of used abbreviations
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LOEC	Lowest Observed Effect Concentration
Met. Corr.	Substance or mixture corrosive to metals
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concern-

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Abbr.	Descriptions of used abbreviations
	ing the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
UFI	Unique formula identifier
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.

Training advice

Training recommendations: Workers must be aware of handling risks and health and environmental protection requirements.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. INDUSTRIAL STRENGHT is a trademark of Branson Ultrasonic SARL.