

SAFETY DATA SHEET according to regulation 1907/2006



Product name: 8012 Hercules 2K

Creation date: 26.05.2021, Revision: 27.05.2021, version: 1.1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

8012 Hercules 2K



<https://my.chemius.net/p/T5VdRI/en/pd/en>

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

Relevant identified uses

Cleaning agent.

Uses advised against

No information.

1.3 Details of the supplier of the safety data sheet

Supplier

SILCO, D.O.O.

Šentrupert 5 a

3303 Gomilsko, Slovenia

+386 3 703 3180

n.cvilak@silco-automotive.com

1.4 Emergency Telephone Number

Emergency

112

Supplier

+386 3 703 3180

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin Corr. 1A; H314.1A Causes severe skin burns and eye damage.

Eye Dam. 1; H318 Causes serious eye damage.

2.2 Label elements

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



Signal word: Danger

H314 Causes severe skin burns and eye damage.

EUH208 Contains dimethylaminepropylamine, reaction products with castor oil, ethoxylated, quaternized with dimethylsulfate. May produce an allergic reaction.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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.

P310 Immediately call a POISON CENTER or doctor/physician.

Contains:

Sodium hydroxide

tetrasodium ethylene diamine tetraacetate

alcohols, C12-14, ethoxylated

(1-Hydroxyethylidene)bisphosphonic acid

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

For mixtures see 3.2.

3.2 Mixtures

NAME	CAS EC INDEX REACH	%	CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 (CLP)	SPECIFIC CONC. LIMITS	NOTES FOR SUBSTANCES
Sodium hydroxide	1310-73-2 215-185-5 - 01- 2119457892- 27	10 ≤ x < 12	Met. Corr. 1; H290 Skin Corr. 1A; H314.1A Eye Dam. 1; H318	Skin Corr. 1A; H314.1A; C ≥ 5% Skin Corr. 1B; H314.1B; 2% ≤ C < 5% Skin Irrit. 2; H315; 0.5% ≤ C < 2% Eye Irrit. 2; H319; 0.5% ≤ C < 2%	/
tetrasodium ethylene diamine tetraacetate	64-02-8 200-573-9 607-428-00-2 01- 2119486762- 27	5 ≤ x < 7	Acute Tox. 4; H302 Eye Dam. 1; H318 Acute Tox. 4; H332 STOT RE 2; H373	/	/
alcohols, C12-14, ethoxylated	68439-50-9 - -	5 ≤ x < 7	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Chronic 3; H412	/	/

(1-Hydroxyethylidene)bisphosphonic acid	2809-21-4 220-552-8 - 01- 2119510391- 53	$3 \leq x < 4$	Met. Corr. 1; H290 Acute Tox. 4; H302 Eye Dam. 1; H318	/	/
2-butoxyethanol	111-76-2 203-905-0 603-014-00-0 01- 2119475108- 36	$2 \leq x < 3$	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332	/	/
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1 500-220-1 - 01- 2119488530- 36	$1 \leq x < 2$	Eye Dam. 1; H318	/	/
isopropanol	67-63-0 200-661-7 603-117-00-0 01- 2119457558- 25	$1 \leq x < 2$	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	/	/
octan-1-ol, ethoxylated	27252-75-1 - -	$1 \leq x < 2$	Eye Irrit. 2; H319	/	/
dimethylaminepropylamine, reaction products with castor oil, ethoxylated, quaternized with dimethylsulfate	784144-40-7 - -	$0,708 \leq x < 0,808$	Skin Sens. 1B; H317.1B Eye Dam. 1; H318	/	/
2,2'-iminodiethanol	111-42-2 203-868-0 603-071-00-1 01- 2119488930- 28	$0,1 \leq x < 0,2$	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Repr. 2; H361 STOT RE 2; H373	/	/

SECTION 4: FIRST AID MEASURES

4.1 First aid measures

General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. Person giving first aid should properly protect himself.

Following inhalation

Remove patient to fresh air - move out of dangerous area. Keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Seek medical help immediately.

Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. Immediately obtain professional medical help!

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician immediately!

Following ingestion

Drink plenty of water in small sips. Do not induce vomiting! Never give anything by mouth to an unconscious person. Immediately consult a doctor. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.

Following skin contact

Skin burns: Signs/symptoms may include localised redness, swelling, itching, dryness, blistering.

Following eye contact

Causes burns: signs/symptoms include corneal damage, burns, pain, lacrimation, corrosive effects, partial or complete loss of sight.

Following ingestion

May cause nausea/vomiting and diarrhea. May cause abdominal discomfort. If ingested, may cause burns of the mouth and throat, as well as perforation of the esophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed

No information.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

Full water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke.

5.3 Advice for firefighters

Protective actions

In case of fire evacuate the area. In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training. Cool the endangered containers with water spray.

Special protective equipment for fire-fighters

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

Additional information

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Precautionary measures

Ensure adequate ventilation.

Emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate the danger zone. Prevent access to unprotected personnel. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.

For emergency responders

Use personal protective equipment.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up**For containment**

Stem the spill if this does not pose risks.

For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Make sure the leakage site is well aired. Dispose in accordance with applicable regulations (see Section 13).

OTHER INFORMATION

No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling****Protective measures****Measures to prevent fire**

Ensure adequate ventilation. Ensure proper grounding of the equipment.

Measures to prevent aerosol and dust generation

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

Measures to protect the environment

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

Other measures

No information.

Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Avoid contact with skin, eyes and clothes. Wear suitable protective equipment; see Section 8. Remove contaminated clothes and wash them before reuse. Before entering areas where food is eaten, remove contaminated clothing and protective equipment. Refer to instructions on label and regulations for safety and health at work.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep in well closed containers. Store in accordance with local regulations. Keep in a cool, dry and well ventilated place. Keep away from heat and sources of ignition. Keep away from incompatible products (see section 10). Keep away from food, drink and animal feeding stuffs.

Packaging materials

Store only in original container.

Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)

Recommendations

No information.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

NAME	MG/M ³	ML/M ³	SHORT-TERM VALUE MG/M ³	SHORT-TERM VALUE ML/M ³	REMARK	BIOLOGICAL TOLERANCE VALUES
2-Butoxyethanol (111-76-2)	123	25	246	50	Sk, BMGV	240 mmol butoxyacetic acid/mol creatinine in urine - Post shift
Propan-2-ol (67-63-0)	999	400	1250	500	/	/
Sodium hydroxide (1310-73-2)	/	/	2	/	/	/

Information on monitoring procedures

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents.

DNEL/DMEL values

For product

No information.

For components

NAME	TYPE	EXPOSURE ROUTE	EXP. FREQUENCY	REMARK	VALUE
Sodium hydroxide	Worker	inhalation	long term local effects	/	1 mg/m ³
Sodium hydroxide	Consumer	inhalation	long term local effects	/	1 mg/m ³
tetrasodium ethylene diamine tetraacetate	Worker	inhalation	long term local effects	/	1.5 mg/m ³
tetrasodium ethylene diamine tetraacetate	Worker	inhalation	short term local effects	/	3 mg/m ³
tetrasodium ethylene diamine tetraacetate	Consumer	inhalation	long term local effects	/	0.6 mg/m ³
tetrasodium ethylene diamine tetraacetate	Consumer	inhalation	short term local effects	/	1.2 mg/m ³
tetrasodium ethylene diamine tetraacetate	Consumer	oral	long term systemic effects	/	25 mg/kg bw/day

alcohols, C12-14, ethoxylated	Worker	inhalation	long term systemic effects	/	294 mg/m ³
alcohols, C12-14, ethoxylated	Worker	dermal	long term systemic effects	/	2080 mg/kg bw/day
alcohols, C12-14, ethoxylated	Consumer	inhalation	long term systemic effects	/	87 mg/m ³
alcohols, C12-14, ethoxylated	Consumer	dermal	long term systemic effects	/	1250 mg/kg bw/day
alcohols, C12-14, ethoxylated	Consumer	oral	long term systemic effects	/	25 mg/kg bw/day
(1-Hydroxyethylidene)bisphosphonic acid	Worker	inhalation	long term systemic effects	/	12 mg/m ³
(1-Hydroxyethylidene)bisphosphonic acid	Worker	dermal	long term systemic effects	/	34 mg/kg bw/day
(1-Hydroxyethylidene)bisphosphonic acid	Consumer	inhalation	long term systemic effects	/	2.95 mg/m ³
(1-Hydroxyethylidene)bisphosphonic acid	Consumer	dermal	long term systemic effects	/	17 mg/kg bw/day
(1-Hydroxyethylidene)bisphosphonic acid	Consumer	oral	long term systemic effects	/	1.7 mg/kg bw/day
(1-Hydroxyethylidene)bisphosphonic acid	Consumer	oral	short term systemic effects	/	1.7 mg/kg bw/day
2-butoxyethanol	Worker	inhalation	long term systemic effects	/	98 mg/m ³
2-butoxyethanol	Worker	inhalation	short term systemic effects	/	1091 mg/m ³
2-butoxyethanol	Worker	inhalation	short term local effects	/	246 mg/m ³
2-butoxyethanol	Worker	dermal	long term systemic effects	/	125 mg/kg bw/day
2-butoxyethanol	Worker	dermal	short term systemic effects	/	89 mg/kg bw/day
2-butoxyethanol	Consumer	inhalation	long term systemic effects	/	59 mg/m ³
2-butoxyethanol	Consumer	inhalation	short term systemic effects	/	426 mg/m ³
2-butoxyethanol	Consumer	inhalation	short term local effects	/	147 mg/m ³
2-butoxyethanol	Consumer	dermal	long term systemic effects	/	75 mg/kg bw/day
2-butoxyethanol	Consumer	dermal	short term systemic effects	/	89 mg/kg bw/day
2-butoxyethanol	Consumer	oral	long term systemic effects	/	6.3 mg/kg bw/day

2-butoxyethanol	Consumer	oral	short term systemic effects	/	26.7 mg/kg bw/day
D-Glucopyranose, oligomers, decyl octyl glycosides	Worker	inhalation	long term systemic effects	/	420 mg/m ³
D-Glucopyranose, oligomers, decyl octyl glycosides	Worker	dermal	long term systemic effects	/	595000 mg/kg bw/day
D-Glucopyranose, oligomers, decyl octyl glycosides	Consumer	inhalation	long term systemic effects	/	124 mg/m ³
D-Glucopyranose, oligomers, decyl octyl glycosides	Consumer	dermal	long term systemic effects	/	357000 mg/kg bw/day
D-Glucopyranose, oligomers, decyl octyl glycosides	Consumer	oral	long term systemic effects	/	35.7 mg/kg bw/day
isopropanol	Worker	inhalation	long term systemic effects	/	500 mg/m ³
isopropanol	Worker	dermal	long term systemic effects	/	888 mg/kg bw/day
isopropanol	Consumer	inhalation	long term systemic effects	/	89 mg/m ³
isopropanol	Consumer	dermal	long term systemic effects	/	319 mg/kg bw/day
isopropanol	Consumer	oral	long term systemic effects	/	26 mg/kg bw/day
2,2'-iminodiethanol	Worker	inhalation	long term systemic effects	/	0.75 mg/m ³
2,2'-iminodiethanol	Worker	inhalation	long term local effects	/	0.5 mg/m ³
2,2'-iminodiethanol	Worker	dermal	long term systemic effects	/	0.13 mg/kg bw/day
2,2'-iminodiethanol	Consumer	inhalation	long term systemic effects	/	0.125 mg/m ³
2,2'-iminodiethanol	Consumer	inhalation	long term local effects	/	0.125 mg/m ³
2,2'-iminodiethanol	Consumer	dermal	long term systemic effects	/	0.07 mg/kg bw/day
2,2'-iminodiethanol	Consumer	oral	long term systemic effects	/	0.06 mg/kg bw/day

PNEC values

For product

No information.

For components

NAME	EXPOSURE ROUTE	REMARK	VALUE
tetrasodium ethylene diamine tetraacetate	fresh water	/	2.2 mg/L
tetrasodium ethylene diamine tetraacetate	water, intermittent release	/	1.2 mg/L

tetrasodium ethylene diamine tetraacetate	marine water	/	0.22 mg/L
tetrasodium ethylene diamine tetraacetate	water treatment plant	/	43 mg/L
tetrasodium ethylene diamine tetraacetate	soil	dry weight	0.72 mg/kg
alcohols, C12-14, ethoxylated	fresh water	/	0.074 mg/L
alcohols, C12-14, ethoxylated	water, intermittent release	/	0.004 mg/L
alcohols, C12-14, ethoxylated	marine water	/	0.007 mg/L
alcohols, C12-14, ethoxylated	water, marine, intermittent release	/	0 mg/L
alcohols, C12-14, ethoxylated	water treatment plant	/	10 g/L
alcohols, C12-14, ethoxylated	fresh water sediment	dry weight	66.67 mg/kg
alcohols, C12-14, ethoxylated	marine water sediment	dry weight	6.66 mg/kg
alcohols, C12-14, ethoxylated	soil	dry weight	1 mg/kg
(1-Hydroxyethylidene)bisphosphonic acid	fresh water	/	0.068 mg/L
(1-Hydroxyethylidene)bisphosphonic acid	marine water	/	0.007 mg/L
(1-Hydroxyethylidene)bisphosphonic acid	water treatment plant	/	40 mg/L
(1-Hydroxyethylidene)bisphosphonic acid	fresh water sediment	dry weight	136 mg/kg
(1-Hydroxyethylidene)bisphosphonic acid	marine water sediment	dry weight	13.6 mg/kg
(1-Hydroxyethylidene)bisphosphonic acid	soil	dry weight	10 mg/kg
(1-Hydroxyethylidene)bisphosphonic acid	secondary poisoning	food	3.7 mg/kg
2-butoxyethanol	fresh water	/	8.8 mg/L
2-butoxyethanol	water, intermittent release	/	26.4 mg/L
2-butoxyethanol	marine water	/	0.88 mg/L
2-butoxyethanol	water treatment plant	/	463 mg/L
2-butoxyethanol	fresh water sediment	dry weight	34.6 mg/kg
2-butoxyethanol	marine water sediment	dry weight	3.46 mg/kg
2-butoxyethanol	soil	dry weight	2.33 mg/kg
2-butoxyethanol	secondary poisoning	food	0.02 g/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	fresh water	/	0.176 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	water, intermittent release	/	0.27 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	marine water	/	0.018 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	water treatment plant	/	560 mg/L
D-Glucopyranose, oligomers, decyl octyl glycosides	fresh water sediment	dry weight	1.516 mg/kg

D-Glucopyranose, oligomers, decyl octyl glycosides	marine water sediment	dry weight	0.152 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	soil	dry weight	0.654 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	secondary poisoning	food	111.11 mg/kg
isopropanol	fresh water	/	140.9 mg/L
isopropanol	water, intermittent release	/	140.9 mg/L
isopropanol	marine water	/	140.9 mg/L
isopropanol	water treatment plant	/	2251 mg/L
isopropanol	fresh water sediment	dry weight	552 mg/kg
isopropanol	marine water sediment	dry weight	552 mg/kg
isopropanol	soil	dry weight	28 mg/kg
isopropanol	secondary poisoning	food	160 mg/kg
2,2'-iminodiethanol	fresh water	/	0.021 mg/L
2,2'-iminodiethanol	water, intermittent release	/	0.095 mg/L
2,2'-iminodiethanol	marine water	/	0.002 mg/L
2,2'-iminodiethanol	water treatment plant	/	100 mg/L
2,2'-iminodiethanol	fresh water sediment	dry weight	0.092 mg/kg
2,2'-iminodiethanol	marine water sediment	dry weight	0.009 mg/kg
2,2'-iminodiethanol	soil	dry weight	1.63 mg/kg
2,2'-iminodiethanol	secondary poisoning	food	1.04 mg/kg

8.2 Exposure controls

Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothes. Do not eat, drink or smoke while working. Do not breathe vapours/aerosols. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse. Keep eyewash bottles or personal eyewash units and emergency showers available.

Technical measures to prevent exposure

The use of adequate technical equipment must always take priority over personal protective equipment. Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

Personal protective equipment

Eye and face protection

Wear tight fitting protective goggles and face protection (EN 166).

Hand protection

Protective gloves (EN 374). Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately. 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. The penetration time is determined by the protective glove manufacturer and must be observed.

Appropriate materials

Skin protection

Wear category III professional long-sleeved overalls and safety footwear (see Regulation (EU) 2016/425 and standard EN ISO 20344). Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345). Protective work clothing resistant to liquid chemicals (EN 14605).

Respiratory protection

At elevated concentrations of vapours/aerosols in the air wear a mask (EN 140) with filter A2-P2 (EN 14387). 'High/elevated concentrations' means that the occupational exposure limit values have been exceeded. For dust/gas/vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard EN 137, EN 138.

Thermal hazards

No information.

Environmental exposure controls

Substance/mixture related measures to prevent exposure

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state

liquid

Colour

red

Odour

characteristic

Important health, safety and environmental information

Odour threshold	No information.
pH	12.9
Melting point/Freezing point	No information.
Initial boiling point/boiling range	No information.
Flash point	> 61 °C
Evaporation rate	No information.
Flammability (solid, gas)	No information.
Explosion limits (vol%)	No information.
Vapour pressure	No information.
Vapour density	No information.

Density / weight	No information.
Solubility	Water: miscible
Partition coefficient	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
Viscosity	No information.
Explosive properties	Product is not explosive.
Oxidising properties	Not oxidising.

9.2 OTHER INFORMATION

Solids content	28.61 % (250 °C)
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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Vapours and air can form flammable or explosive mixtures.

10.4 Conditions to avoid

Protect from heat, direct sunlight, open fire, sparks. Heating.

10.5 Incompatible materials

Oxidants.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) Acute toxicity

For product

EXPOSURE ROUTE	TYPE	SPECIES	TIME	VALUE	METHOD	REMARK
inhalation	ATE	/	/	> 20 mg/l	/	/
oral	ATE	/	/	> 2000 mg/kg	/	/
dermal	ATE	/	/	> 2000 mg/kg	/	/

For components

NAME	EXPOSURE ROUTE	TYPE	SPECIES	TIME	VALUE	METHOD	REMARK
Sodium hydroxide	oral	LD ₅₀	rabbit	/	380 mg/kg	/	/
Sodium hydroxide	dermal	LD ₅₀	rat	/	1350 mg/kg	/	/
tetrasodium ethylene diamine tetraacetate	oral	LD ₅₀	rat	/	1780 mg/kg	/	/
tetrasodium ethylene diamine tetraacetate	inhalation	LC ₅₀	rat	4 h	3 mg/l	/	/
alcohols, C12-14, ethoxylated	oral	LD ₅₀	rat	/	2000 mg/kg	/	/
(1-Hydroxyethylidene)bisphosphonic acid	oral	LD ₅₀	rat	/	3130 mg/kg	/	/
(1-Hydroxyethylidene)bisphosphonic acid	dermal	LD ₅₀	rabbit	/	> 5000 mg/kg	/	/
2-butoxyethanol	oral	LD ₅₀	rat	/	1300 mg/kg	/	/
2-butoxyethanol	dermal	LD ₅₀	rabbit	/	> 2000 mg/kg	/	/
2-butoxyethanol	inhalation	LC ₅₀	rat	7 h	> 400 mg/l	/	/
D-Glucopyranose, oligomers, decyl octyl glycosides	oral	LD ₅₀	rat	/	> 2000 mg/kg	/	/
D-Glucopyranose, oligomers, decyl octyl glycosides	dermal	LD ₅₀	/	/	> 2000 mg/kg	/	/
isopropanol	oral	LD ₅₀	rat	/	4710 mg/kg	/	/
isopropanol	dermal	LD ₅₀	rat	/	12800 mg/kg	/	/
isopropanol	inhalation	LC ₅₀	rat	4 h	72.6 mg/l	/	/
octan-1-ol, ethoxylated	oral	LD ₅₀	/	/	> 2000 mg/kg	/	/
dimethylaminopropylamine, reaction products with castor oil, ethoxylated, quaternized with dimethylsulfate	oral	LD ₅₀	rat	/	> 2000 mg/kg	/	/
2,2'-iminodiethanol	oral	LD ₅₀	rat	/	6400 mg/kg	/	/

2,2'-iminodiethanol	inhalation	LC ₅₀	rat	8 h	0.2 mg/l	/	/
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Additional information

The product is not classified for acute toxicity.

(b) Skin corrosion/irritation

No information.

Additional information

Causes severe burns and skin damage.

(c) Serious eye damage/irritation

No information.

Additional information

Causes serious eye damage.

(d) Respiratory or skin sensitisation

No information.

Additional information

It contains at least one ingredient that can cause sensitisation. Can cause allergic reaction.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

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

(h) STOT-single exposure

No information.

Additional information

STOT SE (single exposure): Not classified.

(i) STOT-repeated exposure

No information.

Additional information

STOT RE (repeated exposure): Not classified.

(j) Aspiration hazard

No information.

Additional information

Aspiration hazard: Not classified.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short-term) toxicity

For components

NAME	TYPE	VALUE	EXPOSURE TIME	SPECIES	ORGANISM	METHOD	REMARK
Sodium hydroxide	EC ₅₀	404 mg/L	72 h	algae	/	/	/
tetrasodium ethylene diamine tetraacetate	LC ₅₀	> 100	96 h	fish	/	/	/

tetrasodium ethylene diamine tetraacetate	EC ₅₀	> 100 mg/L	72 h	algae	/	/	/
(1-Hydroxyethylidene)bisphosphonic acid	LC ₅₀	195	96 h	fish	/	/	/
(1-Hydroxyethylidene)bisphosphonic acid	EC ₅₀	527 mg/L	48 h	crustacea	/	/	/
2-butoxyethanol	LC ₅₀	1.474 mg/L	96 h	fish	<i>Lepomis macrochirus</i>	/	/
2-butoxyethanol	EC ₅₀	1.55	48 h	crustacea	<i>Daphnia magna</i>	/	/
2-butoxyethanol	EC ₅₀	1.84 mg/L	72 h	algae	/	/	/
D-Glucopyranose, oligomers, decyl octyl glycosides	LC ₅₀	> 170 mg/L	96 h	fish	<i>Carrasius auratus</i>	/	/
D-Glucopyranose, oligomers, decyl octyl glycosides	EC ₅₀	> 170 mg/L	48 h	crustacea	<i>Daphnia</i>	/	/
D-Glucopyranose, oligomers, decyl octyl glycosides	EC ₅₀	21 mg/L	72 h	algae	/	/	/
isopropanol	EC ₅₀	> 10000 mg/L	48 h	crustacea	/	/	/
octan-1-ol, ethoxylated	LC ₅₀	> 100	96 h	fish	/	/	/
octan-1-ol, ethoxylated	EC ₅₀	> 100 mg/L	48 h	crustacea	/	/	/
2,2'-iminodiethanol	LC ₅₀	1460 mg/L	96 h	fish	<i>Pimephales promelas</i>	/	/
2,2'-iminodiethanol	EC ₅₀	55	48 h	crustacea	<i>Daphnia magna</i>	/	/
2,2'-iminodiethanol	EC ₅₀	9.7 mg/L	96 h	algae	<i>Pseudokirchneriella subcapitata</i>	/	/

Chronic (long-term) toxicity
For components

NAME	TYPE	VALUE	EXPOSURE TIME	SPECIES	ORGANISM	METHOD	REMARK
alcohols, C12-14, ethoxylated	NOEC	> 0.1 mg/l	/	fish	/	/	/
alcohols, C12-14, ethoxylated	NOEC	> 0.1 mg/l	/	crustacea	<i>Daphnia</i>	/	/
alcohols, C12-14, ethoxylated	NOEC	> 0.1 mg/l	/	algae	/	/	/
2-butoxyethanol	NOEC	> 100 mg/l	/	fish	/	/	/
2-butoxyethanol	NOEC	100 mg/l	/	crustacea	/	/	/
D-Glucopyranose, oligomers, decyl octyl glycosides	NOEC	1 mg/l	/	fish	/	/	/

2,2'-iminodiethanol	NOEC	0.78 mg/l	/	crustacea	<i>Daphnia magna</i>	/	/
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12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

No information.

Biodegradation

For components

NAME	TYPE	RATE	TIME	EVALUATION	METHOD	REMARK
alcohols, C12-14, ethoxylated	-	/	/	readily biodegradable	/	/
(1-Hydroxyethylidene)bisphosphonic acid	-	/	/	Not rapidly biodegradable.	/	/
2-butoxyethanol	-	/	/	rapidly biodegradable	/	/
D-Glucopyranose, oligomers, decyl octyl glycosides	-	/	/	rapidly biodegradable	/	/
isopropanol	-	/	/	rapidly biodegradable	/	/
octan-1-ol, ethoxylated	-	/	/	rapidly biodegradable	/	/

12.3 Bioaccumulative potential

Partition coefficient

For components

NAME	MEDIA	VALUE	TEMPERATURE	PH	CONCENTRATION	METHOD
2-butoxyethanol	Octanol-water (log Pow)	0.81	/	/	/	/
isopropanol	Octanol-water (log Pow)	0.05	/	/	/	/

Bioconcentration factor (BCF)

For components

NAME	SPECIES	ORGANISM	VALUE	DURATION	EVALUATION	METHOD	REMARK
2-butoxyethanol	BCF	/	2.5	/	/	/	/

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

12.5 Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances in percentages greater than 0.1%.

12.6 Other adverse effects

No information.

12.7 Additional information**For product**

Do not allow to reach ground water, water courses or sewage system.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product / Packaging disposal****Waste chemical**

Dispose of in accordance with applicable waste disposal regulation. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste. Do not allow product to reach drains/sewage systems.

Waste codes / waste designations according to LoW

No information.

Packaging

Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

No information.

Waste treatment-relevant information

No information.





Sewage disposal-relevant information

No information.

Other disposal recommendations

No information.

SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number			
UN 1719	UN 1719	UN 1719	UN 1719
14.2 UN proper shipping name			
CAUSTIC ALKALI LIQUID, N.O.S.	CAUSTIC ALKALI LIQUID, N.O.S.	CAUSTIC ALKALI LIQUID, N.O.S.	CAUSTIC ALKALI LIQUID, N.O.S.
14.3 Transport hazard class(es)			
8	8	8	8
			
14.4 Packing group			

II	II	II	II
14.5 Environmental hazards			
NO	NO	NO	NO
14.6 Special precautions for user			
Limited quantities 1 L Transport category 2 Tunnel restriction code (E)	Limited quantities 1 L EmS F-A, S-B Special provisions 274 Packing Instructions P001, IBC02 Tank instructions T11 Tank special provisions TP2, TP27	Limited Quantity Packing Instructions Y840 Limited Quantity Net Qty 0.5 L Passenger Packing Instruction Packing Instructions 851 Passenger Packing Instruction Net Qty 1 L	Limited quantities 1 L
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code			
Goods may not be carried in bulk in bulk containers, containers or vehicles.	Goods may not be carried in bulk in bulk containers, containers or vehicles.	Not given/not applicable	Not given/not applicable

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)(including last amendment Commission Regulation (EU) 2015/830)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)
not applicable

Regulation EC 648/2004 on detergents

5% - < 15%: non-ionic surfactants, EDTA and salts thereof;< 5%: phosphonates, anionic surfactants, cationic surfactants

Special instructions

Regulation (EC) No. 1907/2006 (REACH) Annex XVII - Terms of restriction: 3, 40. Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers.

15.2 Chemical Safety Assessment

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

SECTION 16: OTHER INFORMATION

Indication of changes

2.2 Label elements 3.2 Mixtures 8.1 Control parameters 11.1 Information on toxicological effects 12.1 Toxicity 12.2 Persistence and degradability 12.3 Bioaccumulative potential

Key literature references and sources for data

No information.

Abbreviations and acronyms

ATE - Acute Toxicity Estimate

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure

(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

H225 Highly flammable liquid and vapour.
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
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.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.