Safety Data Sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)

Alkaline Wheel Cleaner

Version number: GHS 11.0
Replaces version of: 2022-10-11 (GHS 10)

Revision: 2023-01-03

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

1.1 Product identifier

Trade name: **Alkaline Wheel Cleaner**

Product code(s): 80180

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

Relevant identified uses: cleaning agent
industrial uses
professional uses

Uses advised against: Do not use for squirting or spraying in its concentrated form. Do not use for products which come into direct contact with the skin. Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

Tristar Cleaning Products UK Ltd.
Unit 3 Ripley Close
WF6 1TB Normanton, Wakefield
United Kingdom
Tel: +44 1924856390
E-mail: info@tristargroup.uk

1.4 Emergency telephone number

Emergency information service: for emergency responders
This number is only for medical emergencies.

Poison centre

Country	Name	e-Mail
United Kingdom	National Poisons Information Service (NPIS)	director.birmingham.unit@npis.org

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	1	Skin Corr. 1	H314
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318

For full text of Hazard- and EU Hazard-statements: 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.

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 dust/fume/gas/mist/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.
P310	Immediately call a POISON CENTER/doctor.
P390	Absorb spillage to prevent material damage.
P501	Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling: Isotridecanol, ethoxylated, Natriummetasilicaat 5Aq, tetrasodium ethylenediaminetetraacetate, Sodium hydroxide

2.3 Other hazards

Results of PBT and vPvB assessment

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of sub-stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes	Specific Conc. Limits	M-Factors
Isotridecanol, ethoxylated (>=2.5 EO)	CAS No 69011-36-5 EC No 931-138-8	5 – < 10	Acute Tox. 4 / H302 Eye Dam. 1 / H318			Eye Dam. 1; H318: C ≥ 10 % Eye Irrit. 2; H319: 1 % ≤ C < 10 %	

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes	Specific Conc. Limits	M-Factors
Disodium metasilicate	CAS No 10213-79-3 EC No 229-912-9 Index No 014-010-00-8	1 – < 5	Met. Corr. 1 / H290 Skin Corr. 1B / H314 Eye Dam. 1 / H318 STOT SE 3 / H335			Met. Corr. 1; H290: C ≥ 5 %	
Tetrasodium ethylenediaminetetraacetate	CAS No 64-02-8 EC No 200-573-9 Index No 607-428-00-2	1 – < 5	Acute Tox. 4 / H302 Acute Tox. 4 / H332 Eye Dam. 1 / H318 STOT RE 2 / H373		GHS-HC		
Betaines, C12-14 (even numbered)-alkyldimethyl	CAS No 66455-29-6 EC No 266-368-1 931-700-2	1 – < 5	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Chronic 3 / H412			Skin Irrit. 2; H315: C ≥ 16 % Eye Dam. 1; H318: C ≥ 16 % Eye Irrit. 2; H319: 1 % ≤ C < 16 %	
D-Glucopyranose, oligomers, decyl octyl glycosides	CAS No 68515-73-1 EC No 500-220-1	1 – < 5	Eye Dam. 1 / H318			Eye Dam. 1; H318: C ≥ 10 % Eye Irrit. 2; H319: 3 % ≤ C < 10 %	
Sodium hydroxide	CAS No 1310-73-2 EC No 215-185-5 Index No 011-002-00-6	< 1	Met. Corr. 1 / H290 Skin Corr. 1A / H314 Eye Dam. 1 / H318			Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 % Eye Dam. 1; H318: C ≥ 2 % Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %	

Notes
GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
Isotridecanol, ethoxylated (>=2.5 EO)	Eye Dam. 1; H318: C ≥ 10 % Eye Irrit. 2; H319: 1 % ≤ C < 10 %	-	555.6 $^{mg}/_{kg}$	oral
Natriummetasilicaat 5Aq	Met. Corr. 1; H290: C ≥ 5 %	-	-	
tetrasodium ethylenediaminetetraacetate	-	-	>1,780 $^{mg}/_{kg}$ 1.5 $^{mg}/_{l}$/4h	oral inhalation: dust/mist
alkyl dimethyl betaine	Skin Irrit. 2; H315: C ≥ 16 % Eye Dam. 1; H318: C ≥ 16 % Eye Irrit. 2; H319: 1 % ≤ C < 16 %	-	-	

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
D-Glucopyranose, oligomers, decyl octyl glycosides	Eye Dam. 1; H318: C ≥ 10 % Eye Irrit. 2; H319: 3 % ≤ C < 10 %	-	-	
Sodium hydroxide	Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 % Eye Dam. 1; H318: C ≥ 2 % Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %	-	325 $^{mg}/_{kg}$	oral

For full text of H-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

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

Following skin contact

Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

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

Self-protection of the first aider

Provision of sufficient ventilation. Wear suitable protective clothing, gloves and eye/face protection.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Substance or mixture corrosive to metals.

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

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. Self-contained breathing apparatus (SCBA). SCBA with a chemical protection suit only where personal (close) contact is likely.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Follow emergency procedures such as the need to evacuate the danger area or to consult an expert. Remove persons to safety. Provision of sufficient ventilation. Prevent skin contact. Avoid inhaling sprayed product. Collection and use of expertise.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

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

Wipe up with absorbent material (e.g. cloth, fleece). 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

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

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

Use local and general ventilation. Use only in well-ventilated areas.

- Handling of incompatible substances or mixtures

Do not mix with acids.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Corrosive conditions

Store in corrosive resistant container with a resistant inner liner.

Control of effects

Protect from sunlight.

Protect against external exposure, such as

frost

- Packaging compatibilities

Keep only in original container. Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

Cleaning agent. Industrial uses. Professional uses.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Source
GB	sodium hydroxide	1310-73-2		WEL				2			EH40/2005

Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
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)

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	DNEL	294 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	DNEL	2,080 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Disodium metasilicate	10213-79-3	DNEL	6.22 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Disodium metasilicate	10213-79-3	DNEL	1.49 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	1.5 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	1.5 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - local effects
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	DNEL	0.822 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	DNEL	0.233 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	DNEL	420 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	DNEL	595,000 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Sodium hydroxide	1310-73-2	DNEL	1 mg/m³	human, inhalatory	worker (industry)	chronic - local effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	PNEC	0.074 mg/l	aquatic organisms	freshwater	short-term (single instance)
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	PNEC	0.007 mg/l	aquatic organisms	marine water	short-term (single instance)
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	PNEC	0.015 mg/l	aquatic organisms	water	intermittent release
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	PNEC	1.4 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	PNEC	0.604 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	PNEC	0.06 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	PNEC	0.1 mg/kg	terrestrial organisms	soil	short-term (single instance)
Tetrasodium ethylenediaminetetraacetate	64-02-8	PNEC	2.83 mg/l	aquatic organisms	freshwater	short-term (single instance)

Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Tetrasodium ethylenediaminetetraacetate	64-02-8	PNEC	0.283 mg/l	aquatic organisms	marine water	short-term (single instance)
Tetrasodium ethylenediaminetetraacetate	64-02-8	PNEC	50 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Tetrasodium ethylenediaminetetraacetate	64-02-8	PNEC	1.1 mg/kg	terrestrial organisms	soil	short-term (single instance)
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	PNEC	0.008 mg/l	aquatic organisms	freshwater	short-term (single instance)
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	PNEC	0.001 mg/l	aquatic organisms	marine water	short-term (single instance)
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	PNEC	2.7 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	PNEC	0.028 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	PNEC	0.003 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	PNEC	10 mg/kg	terrestrial organisms	soil	short-term (single instance)
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	PNEC	0.176 mg/l	aquatic organisms	freshwater	short-term (single instance)
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	PNEC	0.018 mg/l	aquatic organisms	marine water	short-term (single instance)
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	PNEC	560 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	PNEC	1.516 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	PNEC	0.152 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	PNEC	0.654 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. Wear face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

- Type of material

NBR: acrylonitrile-butadiene rubber

- Material thickness

> 0.35 mm

- Breakthrough times of the glove material

>480 minutes (permeation: level 6)

- Other protection measures

Protective clothing against liquid chemicals. Footwear protecting against chemicals. Preventive skin protection (barrier creams/ointments) is recommended. Take recovery periods for skin regeneration. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: ABEK (combined filters against gases and vapours, colour code: Brown/Grey/Yellow/Green).

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 - colourless
Odour	characteristic
Melting point/freezing point	not determined
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	not determined
Flash point	not determined
Auto-ignition temperature	250 °C
pH (value)	12.9 (20 °C) (base)

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	2.339 kPa at 20 °C (calculated value, referring to a component of the mixture)

Density and/or relative density

Density	1.09 $^{g}/_{cm^3}$ at 20 °C
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)

9.2 Other information

Information with regard to physical hazard classes	there is no additional information

Other safety characteristics

Miscibility	Completely miscible with water.
VOC content	6.595 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". Substance or mixture corrosive to metals.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

May be corrosive to metals.

10.5 Incompatible materials

Acids, Oxidisers

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

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	oral	555.6 mg/kg
Tetrasodium ethylenediaminetetraacetate	64-02-8	oral	>1,780 mg/kg
Tetrasodium ethylenediaminetetraacetate	64-02-8	inhalation: dust/mist	1.5 mg/l/4h
Sodium hydroxide	1310-73-2	oral	325 mg/kg

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	oral	LD50	>2,000 mg/kg	rat
Disodium metasilicate	10213-79-3	oral	LD50	770 – 820 mg/kg	mouse
Disodium metasilicate	10213-79-3	inhalation: vapour	LC50	>2.06 mg/l/4h	rat
Disodium metasilicate	10213-79-3	dermal	LD50	>5,000 mg/kg	rat
Tetrasodium ethylenediaminetetraacetate	64-02-8	oral	LD50	>1,780 – <2,000 mg/kg	rat
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	oral	LD50	2,640 mg/kg	mouse
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	dermal	LD50	>2,000 mg/kg	rat
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	oral	LD50	>2,000 mg/kg	rat
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	dermal	LD50	>2,000 mg/kg	rabbit
Sodium hydroxide	1310-73-2	oral	LD50	325 mg/kg	rabbit

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.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

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).

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	10213-79-3	LC50	310 mg/l	fish	96 h
Disodium metasilicate	10213-79-3	EC50	1,700 mg/l	aquatic invertebrates	48 h
Tetrasodium ethylene-diaminetetraacetate	64-02-8	LC50	>100 mg/l	fish	96 h
Tetrasodium ethylene-diaminetetraacetate	64-02-8	EC50	>114 mg/l	aquatic invertebrates	48 h
Tetrasodium ethylene-diaminetetraacetate	64-02-8	ErC50	>60 mg/l	algae	72 h
Betaines, C12-14 (even numbered)-al-kyldimethyl	66455-29-6	LC50	4.44 mg/l	fish	96 h
Betaines, C12-14 (even numbered)-al-kyldimethyl	66455-29-6	EC50	7.76 mg/l	aquatic invertebrates	48 h
Betaines, C12-14 (even numbered)-al-kyldimethyl	66455-29-6	ErC50	1.7 mg/l	algae	72 h

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	LC50	100.8 mg/l	fish	96 h
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	EC50	>100 mg/l	aquatic invertebrates	48 h
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	ErC50	27.22 mg/l	algae	72 h
Sodium hydroxide	1310-73-2	LC50	<180 mg/l	fish	96 h
Sodium hydroxide	1310-73-2	EC50	40.4 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Disodium metasilicate	10213-79-3	EC50	>100 mg/l	microorganisms	3 h
Tetrasodium ethylenediaminetetraacetate	64-02-8	EC50	625 mg/l	aquatic invertebrates	24 h
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	EC50	31.6 mg/l	aquatic invertebrates	21 d
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	LC50	3.2 mg/l	fish	28 d
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	EC50	>560 mg/l	microorganisms	6 h
Sodium hydroxide	1310-73-2	EC50	22 mg/l	microorganisms	15 min

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	DOC removal	82 %	28 d		ECHA
Tetrasodium ethylenediaminetetraacetate	64-02-8	oxygen depletion	78 %	56 d		ECHA
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6	carbon dioxide generation	63 – 79 %	28 d		ECHA

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1	DOC removal	100 %	28 d		ECHA

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Isotridecanol, ethoxylated (>=2.5 EO)	69011-36-5	232.5		
Tetrasodium ethylenediaminetetraacetate	64-02-8	1.8	-13.17 (25 °C)	
Betaines, C12-14 (even numbered)-alkyldimethyl	66455-29-6		-0.4 (pH value: 6.86, 20 °C)	
D-Glucopyranose, oligomers, decyl octyl glycosides	68515-73-1		1.72 (pH value: 6.5, 40 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. 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 3266
IMDG-Code	UN 3266
ICAO-TI	UN 3266

14.2 UN proper shipping name

ADR/RID	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
IMDG-Code	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
ICAO-TI	Corrosive liquid, basic, inorganic, n.o.s.
Technical name (hazardous ingredients)	alkyl dimethyl betaine, Natriummetasilicaat 5Aq

14.3 Transport hazard class(es)

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

14.4 Packing group

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

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.

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)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	E

Hazard identification No	80
Emergency Action Code	2X

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)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Hazard identification No	80

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	8

Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-B
Stowage category	A
Segregation group	18 - Alkalis

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

Danger label(s)	8

Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	1 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)

None of the ingredients are listed.

Deco-Paint Directive

VOC content	0 %

Industrial Emissions Directive (IED)

VOC content	6.595 %

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)

List of pollutants (WFD)

Name of substance	CAS No	Listed in	Remarks
Natriummetasilicaat 5Aq		a)	
Sodium hydroxide		a)	
tetrasodium ethylenediaminetetraacetate		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

none of the ingredients are listed

Dangerous substances with restrictions (GB REACH, Annex 17)

Name of substance	Name acc. to inventory	CAS No	No
Alkaline Wheel Cleaner	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3

National inventories

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

Legend
REACH Reg. REACH registered substances

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
3.2		Description of the mixture: change in the listing (table)	yes
3.2		Description of the mixture: change in the listing (table)	yes
11.1		Acute toxicity estimate (ATE) of components of the mixture: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
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)
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
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)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances

Abbr.	Descriptions of used abbreviations
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
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
log KOW	n-Octanol/water
Met. Corr.	Substance or mixture corrosive to metals
NLP	No-Longer Polymer
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 concerning the International carriage of Dangerous goods by Rail)
SCBA	Self-contained breathing apparatus
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
VOC	Volatile Organic Compounds

Abbr.	Descriptions of used abbreviations
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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.