Safety Data Sheet

acc. to Hazardous Products Regulations (HPR)

TWI-1200

Version number: 2.0
Replaces version of: 2022-07-14 (1)

Revision: 2022-08-16

SECTION 1: Identification

1.1 Product identifier

Trade name **TWI-1200**

Alternative name(s) High pH Presoak

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

Relevant identified uses cleaning agent

Uses advised against Do not use for products which come into direct contact with the skin.

1.3 Details of the supplier of the safety data sheet

Transchem Inc.
1225 Franklin Blvd.
Cambridge Ontario N1R 7E5
Canada

Telephone: +1.800.265.9100
e-mail: info@transchem.com
Website: https://transchem.com/

Additional information

Supplier of the product

Country	Name	Postal code/city	Telephone	Telefax	Website
United States	Transchem Pro Inc.	Park Ridge	1 (877) 857-3870		www.turtlewaxpro.com

e-mail (competent person) kberzitis@transchem.com (Karl Berzitis)

1.4 Emergency telephone number

Emergency information service CANUTEC (Canada) 613-996-6666
INFOTRAC (U.S.) 1-800-535-5053
INFOTRAC (International) +1-352-323-3500

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
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 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.

2.2 Label elements

Labeling

- Signal word danger

- Pictograms

GHS05

- Hazard statements

H314	Causes severe skin burns and eye damage.

- Precautionary statements

P260	Do not breathe dusts or mists.
P264	Wash hands and skin thoroughly after handling.
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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS
tetrasodium ethylene diamine tetraacetate	CAS No 64-02-8	1 – < 5	Acute Tox. 4 / H302 Eye Dam. 1 / H318
Alcohols, C9-11, ethoxylated	CAS No 68439-46-3	1 – < 5	Acute Tox. 4 / H302 Eye Dam. 1 / H318
sodium hydroxide	CAS No 1310-73-2	1 – < 5	Acute Tox. 4 / H302 Skin Corr. 1A / H314 Eye Dam. 1 / H318
sodium silicate	CAS No 1344-09-8	1 – < 5	Acute Tox. 3 / H331 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 STOT SE 3 / H335
potassium hydroxide	CAS No 1310-58-3	1 – < 5	Acute Tox. 4 / H302 Skin Corr. 1A / H314 Eye Dam. 1 / H318
Sodium N-(2-carboxyethyl)-N-[3-(decyloxy)propyl]-β-alaninate	CAS No 64972-19-6	1 – < 5	Eye Irrit. 2 / H319

Name of substance	Identifier	Wt%	Classification acc. to GHS
2-butoxyethanol	CAS No 111-76-2	1 – < 5	Flam. Liq. 4 / H227 Acute Tox. 4 / H302 Acute Tox. 3 / H311 Acute Tox. 3 / H331 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319

For full text of abbreviations: 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. 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

Wash with plenty of soap and water.

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.

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: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

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. Coordinate 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. 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.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water 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

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. Never add water to this product.

- 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

- General rule

Keep out of reach of children. Store in a dry place. Store in a closed container. Store in a well-ventilated place. Keep away from ... (incompatible materials to be indicated by the manufacturer).

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
CA	2-butoxyethanol	111-76-2	PEV/VEA	20							Regulation OHS
CA	2-butoxyethanol (EGBE)	111-76-2	OEL (BC)	20							"BC Regulation"
CA	2-butoxyethanol (EGBE)	111-76-2	OEL (ON-MoL)	20							MoL
CA	2-butoxyethanol (ethylene glycol monobutyl ether)	111-76-2	OEL (AB)	20	97						OHS Code
CA	potassium hydroxide	1310-58-3	OEL (AB)						2		OHS Code
CA	potassium hydroxide	1310-58-3	OEL (BC)						2		"BC Regulation"
CA	potassium hydroxide	1310-58-3	OEL (ON-MoL)						2		MoL
CA	potassium hydroxide	1310-58-3	PEV/VEA					2			Regulation OHS
CA	sodium hydroxide	1310-73-2	OEL (AB)						2		OHS Code
CA	sodium hydroxide	1310-73-2	OEL (BC)						2		"BC Regulation"
CA	sodium hydroxide	1310-73-2	OEL (ON-MoL)					2			MoL
CA	sodium hydroxide	1310-73-2	PEV/VEA						2		Regulation OHS

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	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
tetrasodium ethylene diamine tetraacetate	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	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
tetrasodium ethylene diamine tetraacetate	64-02-8	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
tetrasodium ethylene diamine tetraacetate	64-02-8	DNEL	1.5 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
tetrasodium ethylene diamine tetraacetate	64-02-8	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - local effects
Alcohols, C9-11, ethoxylated	68439-46-3	DNEL	294 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Alcohols, C9-11, ethoxylated	68439-46-3	DNEL	2,080 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
potassium hydroxide	1310-58-3	DNEL	1 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
2-butoxyethanol	111-76-2	DNEL	98 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2-butoxyethanol	111-76-2	DNEL	1,091 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
2-butoxyethanol	111-76-2	DNEL	246 mg/m³	human, inhalatory	worker (industry)	acute - local effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
tetrasodium ethylene diamine tetraacetate	64-02-8	PNEC	2.83 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
tetrasodium ethylene diamine tetraacetate	64-02-8	PNEC	0.283 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
tetrasodium ethylene diamine tetraacetate	64-02-8	PNEC	50 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
tetrasodium ethylene diamine tetraacetate	64-02-8	PNEC	1.1 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
Alcohols, C9-11, ethoxylated	68439-46-3	PNEC	0.104 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
Alcohols, C9-11, ethoxylated	68439-46-3	PNEC	0.104 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
Alcohols, C9-11, ethoxylated	68439-46-3	PNEC	1.4 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Alcohols, C9-11, ethoxylated	68439-46-3	PNEC	13.7 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
Alcohols, C9-11, ethoxylated	68439-46-3	PNEC	13.7 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
Alcohols, C9-11, ethoxylated	68439-46-3	PNEC	1 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	8.8 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)

Relevant PNECs of components of the mixture						
Name of substance	**CAS No**	**Endpoint**	**Threshold level**	**Organism**	**Environmental compartment**	**Exposure time**
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)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/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.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Avoid release to the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	transparent - light orange
Particle	not relevant (liquid)
Odor	characteristic

Other safety parameters

pH (value)	13 – 13.6 (23 °C) (base)
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	not determined
Density	not determined
Vapor density	this information is not available
Relative density	1.11 at 23 °C (water = 1)
Solubility(ies)	not determined

Partition coefficient

- n-octanol/water (log KOW)	this information is not available

Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	not explosive (GHS of the United Nations, annex 4)
Oxidizing properties	none

9.2	**Other information**	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidizers

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.

GHS of the United Nations, annex 4: May be harmful if swallowed.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
tetrasodium ethylene diamine tetraacetate	64-02-8	oral	>1,780 mg/kg
Alcohols, C9-11, ethoxylated	68439-46-3	oral	500 mg/kg
sodium hydroxide	1310-73-2	oral	325 mg/kg
sodium silicate	1344-09-8	inhalation: vapour	>2.06 mg/l/4h
sodium silicate	1344-09-8	inhalation: dust/mist	0.5 mg/l/4h
potassium hydroxide	1310-58-3	oral	333 mg/kg
2-butoxyethanol	111-76-2	oral	530 mg/kg
2-butoxyethanol	111-76-2	dermal	667 mg/kg
2-butoxyethanol	111-76-2	inhalation: vapour	≥3.9 mg/l/4h

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
tetrasodium ethylene diamine tetraacetate	64-02-8	oral	LD50	>1,780 – <2,000 mg/kg	rat
Alcohols, C9-11, ethoxylated	68439-46-3	oral	LD50	<2,000 mg/kg	rat
Alcohols, C9-11, ethoxylated	68439-46-3	dermal	LD50	>2,000 mg/kg	rabbit
sodium hydroxide	1310-73-2	oral	LD50	325 mg/kg	rabbit
sodium silicate	1344-09-8	oral	LD50	3,400 mg/kg	rat
sodium silicate	1344-09-8	inhalation: vapour	LC50	>2.06 mg/l/4h	rat
sodium silicate	1344-09-8	dermal	LD50	>5,000 mg/kg	rat
potassium hydroxide	1310-58-3	oral	LD50	333 mg/kg	rat

Acute toxicity of components of the mixture					
Name of substance	**CAS No**	**Exposure route**	**Endpoint**	**Value**	**Species**
2-butoxyethanol	111-76-2	oral	LD50	530 $^{mg}/_{kg}$	rat
2-butoxyethanol	111-76-2	inhalation: vapour	LC50	≥3.9 $^{mg}/_{l}$/4h	rat
2-butoxyethanol	111-76-2	inhalation: vapour	LC50	2.175 $^{mg}/_{l}$/4h	rat
2-butoxyethanol	111-76-2	dermal	LD50	667 – 1,060 $^{mg}/_{kg}$	rabbit
2-butoxyethanol	111-76-2	dermal	LD50	400 – 500 $^{mg}/_{kg}$	rabbit

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

- IARC Monographs (WHO)

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans			
Name of substance	**CAS No**	**Classification**	**Number**
2-butoxyethanol	111-76-2	3	

Legend

3	Not classifiable as to carcinogenicity in humans

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.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
tetrasodium ethylene diamine tetraacetate	64-02-8	LC50	>100 mg/l	fish	96 h
tetrasodium ethylene diamine tetraacetate	64-02-8	EC50	>114 mg/l	aquatic invertebrates	48 h
tetrasodium ethylene diamine tetraacetate	64-02-8	ErC50	>60 mg/l	algae	72 h
Alcohols, C9-11, ethoxylated	68439-46-3	LC50	7 mg/l	fish	96 h
Alcohols, C9-11, ethoxylated	68439-46-3	EC50	2.5 mg/l	aquatic invertebrates	48 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
sodium silicate	1344-09-8	LC50	310 mg/l	fish	96 h
sodium silicate	1344-09-8	EC50	1,700 mg/l	aquatic invertebrates	48 h
sodium silicate	1344-09-8	ErC50	>345.4 mg/l	algae	72 h
Sodium N-(2-carboxyethyl)-N-[3-(decyloxy)propyl]-β-alaninate	64972-19-6	LC50	60.6 mg/l	fathead minnow (Pimephales promelas)	96 h
Sodium N-(2-carboxyethyl)-N-[3-(decyloxy)propyl]-β-alaninate	64972-19-6	LC50	100 – 250 mg/l	fathead minnow (Pimephales promelas)	24 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

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Alcohols, C9-11, ethoxylated	68439-46-3	EC50	140 mg/l	microorganisms	3 h
sodium hydroxide	1310-73-2	EC50	22 mg/l	microorganisms	15 min
2-butoxyethanol	111-76-2	EC50	297 mg/l	aquatic invertebrates	21 d

Biodegradation

The surfactant contained in this preparation complies with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents.

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
tetrasodium ethylene diamine tetraacetate	64-02-8	oxygen depletion	78 %	56 d		ECHA
2-butoxyethanol	111-76-2	carbon dioxide generation	18.3 %	3 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
tetrasodium ethylene diamine tetraacetate	64-02-8	1.8	-13.17 (25 °C)	
Alcohols, C9-11, ethoxylated	68439-46-3	12.7		
2-butoxyethanol	111-76-2		0.81 (pH value: 7, 25 °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

Dispose of contents/container in accordance with local/regional/national/international regulations.

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/packages

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) 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

UN RTDG	UN 3266
IMDG-Code	UN 3266
ICAO-TI	UN 3266

14.2 UN proper shipping name

UN RTDG	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)	sodium hydroxide, sodium silicate

14.3 Transport hazard class(es)

UN RTDG	8
IMDG-Code	8
ICAO-TI	8

14.4 Packing group

UN RTDG	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

There is no additional information.

14.7 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

Transport information - National regulations - Additional information (UN RTDG)

UN number	3266
Class	8
Packing group	III
Danger label(s)	8

Special provisions (SP)	223, 274 (UN RTDG)
Excepted quantities (EQ)	E1 (UN RTDG)
Limited quantities (LQ)	5 L (UN RTDG)

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 specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) all ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
potassium hydroxide	1310-58-3		1	1000 (454)
sodium hydroxide	1310-73-2		1	1000 (454)

Legend
1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
sodium hydroxide	1310-73-2		OEHHA RELs
2-butoxyethanol	111-76-2		OEHHA RELs

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
2-butoxyethanol		1022			1.0 %
potassium hydroxide	1310-58-3				1.0 %
sodium hydroxide	1310-73-2				1.0 %

- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
2-butoxyethanol	111-76-2	A, O	skin
potassium hydroxide	1310-58-3	A	
sodium hydroxide	1310-73-2	A, N, O	

Legend

A	American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
N	National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer
O	Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division
skin	If a potential for absorption from skin contact merits special consideration, the word "skin" follows the substance name.

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
2-butoxyethanol	111-76-2		CA F2
potassium hydroxide	1310-58-3		CO R1
sodium hydroxide	1310-73-2		CO R1

Legend

CA	Carcinogenic
CO	Corrosive
F2	Flammable - Second Degree
R1	Reactive - First Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
ETHANOL, 2-BUTOXY-	111-76-2	
POTASSIUM HYDROXIDE (K(OH))	1310-58-3	E
SODIUM HYDROXIDE (NA(OH))	1310-73-2	E

Legend

E	Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
2-butoxyethanol	111-76-2	T
potassium hydroxide	1310-58-3	T, F
sodium hydroxide	1310-73-2	T, F

Legend
F Flammability (NFPA®)
T Toxicity (ACGIH®)

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	0	material that will not burn under typical fire conditions
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	0	material that will not burn under typical fire conditions
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National regulations (Canada)

Domestic Substances List (DSL)

All ingredients are listed.

National inventories

Country	Inventory	Status
CA	DSL	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
US	TSCA	all ingredients are listed

Legend
DSL Domestic Substances List (DSL)
REACH Reg. REACH registered substances

Legend
TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

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
11.1	Acute toxicity: Shall not be classified as acutely toxic.GHS of the United Nations, annex 4: May be harmful if swallowed or if inhaled.	Acute toxicity: Shall not be classified as acutely toxic.GHS of the United Nations, annex 4: May be harmful if swallowed.	yes
11.1		Acute toxicity estimate (ATE) 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
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
14.2	Technical name (hazardous ingredients): disodium metasilicate, sodium hydroxide	Technical name (hazardous ingredients): sodium hydroxide, sodium silicate	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
"BC Regulation"	OHS Regulation: Section 5.48 (British Columbia)
ACGIH®	American Conference of Governmental Industrial Hygienists
Acute Tox.	Acute toxicity
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
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level

Abbr.	Descriptions of used abbreviations
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
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
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IARC	International Agency for Research on Cancer
IARC Monographs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
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
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
LHS	Lower hazard substance
log KOW	n-Octanol/water
MoL	Ministry of Labor: Current Occupational Exposure Limits for Ontario Workplaces Required under Regulation 833
NFPA®	National Fire Protection Association (United States)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OHS Code	Occupational Health and Safety Code: Occupational exposure limits for chemical substances (Alberta)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Regulation OHS	Regulation respecting occupational health and safety: Permissible exposure values for airborne contaminants (Quebec)
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin

Abbr.	Descriptions of used abbreviations
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
UN RTDG	UN Recommendations on the Transport of Dangerous Good
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Hazardous Products Regulations (HPR).

UN Recommendations on the Transport of Dangerous Good. 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
H227	Combustible liquid.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
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.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.