

ALCS-440

Version number: 2.0
Replaces version of: 2024-08-14 (1)

Revision: 2025-04-30

1 Identification

1.1 Product identifier

Trade name **ALCS-440**
Alternative name(s) Purple Plus

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

Relevant identified uses cleaning agent

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/

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

1.4 Emergency telephone number

Emergency information service INFOTRAC 1-800-535-5053, 24 Hours

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	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labeling

- Signal word danger

- Pictograms

GHS05



- Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.

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- Precautionary statements
 - P264 Wash hands and face thoroughly after handling.
 - P280 Wear eye protection or face protection.
 - P302+P352 IF ON SKIN: Wash with plenty of water.
 - 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.
 - P362+P364 Take off contaminated clothing and wash it before reuse.

2.3 Other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

3 Composition/ Information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Other names or synonyms	Identifier	Wt%	Classification acc. to GHS
tetrasodium ethylene diamine tetraacetate	EDTA tetrasodium 2,2',2'',2'''-(ethane-1,2-diyldinitrilo)tetraacetate	CAS No 64-02-8	5 – < 10	Acute Tox. 4 / H302 Eye Dam. 1 / H318
Alcohols, C9-11, ethoxylated	Alcohol Ethoxylate	CAS No 68439-46-3	1 – < 5	Acute Tox. 4 / H302 Eye Dam. 1 / H318
trisodium nitrilotriacetate	trisodium 2-[bis(carboxymethyl)amino]acetate NTA	CAS No 5064-31-3	1 – < 5	Acute Tox. 4 / H302 Eye Irrit. 2 / H319 Carc. 2 / H351
2-butoxyethanol	ethyleneglycol monobutyl ether butyl cellosolve	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
sodium hydroxide	caustic soda	CAS No 1310-73-2	0.1 – < 1	Acute Tox. 4 / H302 Skin Corr. 1A / H314 Eye Dam. 1 / H318
sodium silicate	Silicic acid, sodium salt sodium hydroxy(oxo)silicate	CAS No 1344-09-8	0.1 – < 1	Acute Tox. 3 / H331 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 STOT SE 3 / H335

Remarks

The specific chemical identity and/or exact percentage of composition (concentration) has been withheld as a trade secret. For full text of abbreviations: see SECTION 16.

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.

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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

Impairment of vision. Production of tissue damage in the eye. Conjunctivitis (pink eye). Localized redness, edema, pruritis and/or pain.

4.3 Indication of any immediate medical attention and special treatment needed

Rinse immediately carefully and thoroughly with eye shower or water. Treat symptomatically.

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 (NO_x), 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.

Special protective equipment for firefighters

Chemical protective clothing, Eye and face protection, Wear self-contained breathing apparatus

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Prevent skin contact. 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

Set up barriers, 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

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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.

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

- Incompatible substances or mixtures

Acids, Oxidizers

- 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.

7.3 Specific end use(s)

See section 16 for a general overview.

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/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
CA	2-butoxyethanol	111-76-2	PEV/VE A	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	sodium hydroxide	1310-73-2	OEL (AB)						2		OHS Code
CA	sodium hydroxide	1310-73-2	OEL						2		"BC"

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Occupational exposure limit values (Workplace Exposure Limits)

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			(BC)								Regulation"
CA	sodium hydroxide	1310-73-2	OEL (ON-MoL)					2			MoL
CA	sodium hydroxide	1310-73-2	PEV/VE A						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

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/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
tetrasodium ethylene diamine tetraacetate	64-02-8	DNEL	3 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
tetrasodium ethylene diamine tetraacetate	64-02-8	DNEL	1.5 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
tetrasodium ethylene diamine tetraacetate	64-02-8	DNEL	3 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
Alcohols, C9-11, ethoxylated	68439-46-3	DNEL	294 mg/m ³	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
trisodium nitrilotriacetate	5064-31-3	DNEL	3.5 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
trisodium nitrilotriacetate	5064-31-3	DNEL	5.25 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
2-butoxyethanol	111-76-2	DNEL	98 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
2-butoxyethanol	111-76-2	DNEL	1,091 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
2-butoxyethanol	111-76-2	DNEL	246 mg/m ³	human, inhalatory	worker (industry)	acute - local effects

Relevant PNECs of components

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)

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Relevant PNECs of components						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
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)
trisodium nitrilotriacetate	5064-31-3	PNEC	540 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
trisodium nitrilotriacetate	5064-31-3	PNEC	0.93 mg/l	aquatic organisms	freshwater	short-term (single instance)
trisodium nitrilotriacetate	5064-31-3	PNEC	0.093 mg/l	aquatic organisms	marine water	short-term (single instance)
trisodium nitrilotriacetate	5064-31-3	PNEC	0.8 mg/l	aquatic organisms	water	intermittent release
2-butoxyethanol	111-76-2	PNEC	8.8 mg/l	aquatic organisms	freshwater	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	0.88 mg/l	aquatic organisms	marine water	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	463 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	34.6 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	3.46 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
2-butoxyethanol	111-76-2	PNEC	2.33 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. Use protective eyewear to guard against splash of liquids.

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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.

Body protection

Protective clothing against liquid chemicals.

Respiratory protection

Full face mask/half mask/quarter mask (EN 136/140). Type : B (against inorganic gases and vapors, color code: Grey).

Environmental exposure controls

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

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	clear - purple
Odor	like soap
Odor threshold	no data available
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Evaporation rate	not determined
Flammability	non-combustible
Lower and upper explosion limit	not determined
Flash point	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	12.5 – 13.3 (23 °C) (base)
Kinematic viscosity	not determined
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapor pressure	not determined
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Density and/or relative density

Density	not determined
Relative vapour density	information on this property is not available
Relative density	1.05 at 23 °C (water = 1)

Particle characteristics	not relevant (liquid)
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9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

10 Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions. Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. 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

Acids, 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.

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.

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Acute toxicity estimate (ATE) of components

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
trisodium nitrilotriacetate	5064-31-3	oral	1,740 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
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

Acute toxicity of components

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
trisodium nitrilotriacetate	5064-31-3	oral	LD50	1,740 mg/kg	rat
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
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

Skin corrosion/irritation

Causes skin irritation. In vitro skin corrosion: human skin model test. Shall not be classified as corrosive to skin.

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.

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- 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	
trisodium nitrilotriacetate		2B	

Legend

- 2B Possibly carcinogenic to humans
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.

Information on likely routes of exposure

If on skin, If inhaled, If in eyes

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed:

Diarrhoea, Vomiting, Abdominal pain

If in eyes:

Causes tears, Production of tissue damage in the eye, Conjunctivitis (pink eye), Risk of blindness

If inhaled:

Localized redness, edema, pruritis and/or pain, Cough, Headache

If on skin:

Localized redness, edema, pruritis and/or pain

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation and significant inflammation of the skin (dermatitis) due to the defatting properties of the product may be caused by repeated or prolonged exposure.

12 Ecological information

12.1 Toxicity

Harmful to aquatic life.

Aquatic toxicity (acute) of components					
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, eth-	68439-46-3	LC50	7 mg/l	fish	96 h

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Aquatic toxicity (acute) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
oxylated					
Alcohols, C9-11, eth-oxylated	68439-46-3	EC50	2.5 mg/l	aquatic invertebrates	48 h
trisodium nitrilotriacetate	5064-31-3	LC50	114 mg/l	fish	96 h
trisodium nitrilotriacetate	5064-31-3	EC50	98 mg/l	aquatic invertebrates	96 h
trisodium nitrilotriacetate	5064-31-3	ErC50	>91.5 mg/l	algae	72 h
2-butoxyethanol	111-76-2	LC50	1,474 mg/l	fish	96 h
2-butoxyethanol	111-76-2	EC50	1,550 mg/l	aquatic invertebrates	48 h
2-butoxyethanol	111-76-2	ErC50	1,840 mg/l	algae	72 h
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

Aquatic toxicity (chronic) of components

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

12.2 Persistence and degradability

Biodegradation

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

Degradability of components

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
tetrasodium ethylene diamine tetraacetate	64-02-8	oxygen depletion	78 %	56 d		ECHA
trisodium nitrilotriacetate	5064-31-3	DOC removal	>95 %	28 d		ECHA
2-butoxyethanol	111-76-2	carbon dioxide generation	18.3 %	3 d		ECHA

12.3 Bioaccumulative potential

Data are not available.

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Bioaccumulative potential of components				
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

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

Data are not available.

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

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.

14 Transport information

14.1 UN number	not subject to transport regulations
14.2 UN proper shipping name	not relevant
14.3 Transport hazard class(es)	none
14.4 Packing group	not assigned
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)

Not subject to transport regulations: UN RTDG

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International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

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

Not subject to ICAO-IATA.

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 (ACTIVE) or exempt from listing

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)
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
trisodium nitrilotriacetate			IARC Carcinogens - 2B
2-butoxyethanol	111-76-2		ATSDR Neurotoxicants OEHHA RELs
sodium hydroxide	1310-73-2		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 %
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

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

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.

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- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
2-butoxyethanol	111-76-2		CA F2
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	
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
2-butoxyethanol	111-76-2	T
sodium hydroxide	1310-73-2	T, F
sodium hydroxide	1310-73-2	T, F
sodium hydroxide	1310-73-2	T, F

Legend

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

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals			
Name acc. to inventory	CAS No	Conc.	Type of the toxicity
dichloroacetic acid	79-43-6	0.00011 wt%	cancer
dichloroacetic acid	79-43-6	0.00011 wt%	developmental, male
formaldehyde	50-00-0	0.00011 wt%	cancer

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

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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 (ACTIVE)

Legend

DSL Domestic Substances List (DSL)
REACH Reg. REACH registered substances
TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

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

16 Other information

Indication of changes (revised safety data sheet)

Revision. 2025-04-30.

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.3	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.		yes
12.5	Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of	Results of PBT and vPvB assessment: Data are not available.	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
	≥ 0.1%.		
16	Indication of changes (revised safety data sheet): Date of compilation. 2024-08-14.	Indication of changes (revised safety data sheet): Revision. 2025-04-30.	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
Carc.	Carcinogenicity
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
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
ED	Endocrine disruptor
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
IMDG	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

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Abbr.	Descriptions of used abbreviations
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
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)
SOR/2022-272: Regulations Amending the Hazardous Products Regulations (GHS, Seventh Revised Edition)
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.
H351	Suspected of causing cancer.

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Disclaimer

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