Safety Data Sheet

acc. to Hazardous Products Regulations (HPR)

TWI-7400

Version number: 2.0
Replaces version of: 2022-08-24 (1)

Revision: 2023-03-31

SECTION 1: Identification

1.1 Product identifier

Trade name **TWI-7400**

Alternative name(s) Foaming Detergent - Cherry

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/

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	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.4S	skin sensitization	1	Skin Sens. 1	H317

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labeling

- Signal word danger

- Pictograms

GHS05, GHS07

- Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

- Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands and face thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/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/doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of ≥ 0,1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.

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
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	CAS No 68439-57-6	10 – < 30	Skin Irrit. 2 / H315 Eye Dam. 1 / H318
Alcohols, C9-11, ethoxylated	CAS No 68439-46-3	5 – < 10	Acute Tox. 4 / H302 Eye Dam. 1 / H318
benzaldehyde	CAS No 100-52-7	1 – < 5	Flam. Liq. 4 / H227 Acute Tox. 4 / H302 Acute Tox. 2 / H330
2-methyl-2H-isothiazol-3-one	CAS No 2682-20-4	< 0.1	Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 2 / H330 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1A / H317

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.

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).

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	benzaldehyde	100-52-7	OEL (ON)			4	17				Regulation 833
CA	benzaldehyde	100-52-7	OEL (ON-MoL)			4	17				MoL

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
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	DNEL	152.2 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	DNEL	2,158 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic 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
benzaldehyde	100-52-7	DNEL	9.8 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
benzaldehyde	100-52-7	DNEL	9.8 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
benzaldehyde	100-52-7	DNEL	1.14 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2-methyl-2H-isothiazol-3-one	2682-20-4	DNEL	0.021 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
2-methyl-2H-isothiazol-3-one	2682-20-4	DNEL	0.043 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
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	PNEC	0.024 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	PNEC	0.002 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	PNEC	4 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	PNEC	0.767 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	PNEC	0.077 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	PNEC	1.21 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)
benzaldehyde	100-52-7	PNEC	0 mg/l	aquatic organisms	freshwater	short-term (single instance)
benzaldehyde	100-52-7	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
benzaldehyde	100-52-7	PNEC	7.59 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
benzaldehyde	100-52-7	PNEC	0.004 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
benzaldehyde	100-52-7	PNEC	0 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
benzaldehyde	100-52-7	PNEC	0.001 mg/kg	terrestrial organisms	soil	short-term (single instance)
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	3.39 µg/l	aquatic organisms	freshwater	short-term (single instance)
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	3.39 µg/l	aquatic organisms	marine water	short-term (single instance)
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	0.23 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	0.047 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 - red
Particle	not relevant (liquid)
Odor	cherry

Other safety parameters

pH (value)	5.5 – 7.5 (23 °C)
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	1.015 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 or if inhaled.

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	**CAS No**	**Exposure route**	**ATE**
Alcohols, C9-11, ethoxylated	68439-46-3	oral	500 $^{mg}/_{kg}$
benzaldehyde	100-52-7	oral	1,430 $^{mg}/_{kg}$
benzaldehyde	100-52-7	inhalation: vapour	1 $^{mg}/_{l}$/4h
2-methyl-2H-isothiazol-3-one	2682-20-4	oral	120 $^{mg}/_{kg}$
2-methyl-2H-isothiazol-3-one	2682-20-4	dermal	242 $^{mg}/_{kg}$
2-methyl-2H-isothiazol-3-one	2682-20-4	inhalation: dust/mist	0.11 $^{mg}/_{l}$/4h

Acute toxicity of components of the mixture					
Name of substance	**CAS No**	**Exposure route**	**Endpoint**	**Value**	**Species**
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	oral	LD50	2,290 $^{mg}/_{kg}$	rat
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	inhalation: dust/mist	LC50	>52 $^{mg}/_{l}$/4h	rat
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	dermal	LD50	6,300 $^{mg}/_{kg}$	rabbit
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
benzaldehyde	100-52-7	oral	LD50	1,430 $^{mg}/_{kg}$	rat
benzaldehyde	100-52-7	inhalation: vapour	LC50	1 – 5 $^{mg}/_{l}$/4h	rat
benzaldehyde	100-52-7	dermal	LD50	>2,000 $^{mg}/_{kg}$	rabbit
2-methyl-2H-isothiazol-3-one	2682-20-4	oral	LD50	120 $^{mg}/_{kg}$	rat
2-methyl-2H-isothiazol-3-one	2682-20-4	inhalation: dust/mist	LC50	0.11 $^{mg}/_{l}$/4h	rat
2-methyl-2H-isothiazol-3-one	2682-20-4	dermal	LD50	242 $^{mg}/_{kg}$	rat

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

May cause an allergic skin reaction.

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.

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
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	LC50	4.2 $^{mg}/_{l}$	fish	96 h
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	EC50	4.53 $^{mg}/_{l}$	aquatic invertebrates	48 h
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	ErC50	5.2 $^{mg}/_{l}$	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
benzaldehyde	100-52-7	LC50	12.4 $^{mg}/_{l}$	fish	96 h
benzaldehyde	100-52-7	EC50	19.7 $^{mg}/_{l}$	aquatic invertebrates	48 h
benzaldehyde	100-52-7	ErC50	33.1 $^{mg}/_{l}$	algae	72 h
2-methyl-2H-isothiazol-3-one	2682-20-4	LC50	4.77 $^{mg}/_{l}$	fish	96 h
2-methyl-2H-isothiazol-3-one	2682-20-4	EC50	1.7 $^{mg}/_{l}$	aquatic invertebrates	24 h
2-methyl-2H-isothiazol-3-one	2682-20-4	ErC50	>0.072 $^{mg}/_{l}$	algae	96 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	EC50	230 $^{mg}/_{l}$	microorganisms	3 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
2-methyl-2H-isothiazol-3-one	2682-20-4	EC50	1.4 $^{mg}/_{l}$	aquatic invertebrates	21 d
2-methyl-2H-isothiazol-3-one	2682-20-4	ErC50	0.22 $^{mg}/_{l}$	algae	120 h

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 of the mixture						
Name of substance	**CAS No**	**Process**	**Degradation rate**	**Time**	**Method**	**Source**
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	carbon dioxide generation	80 %	28 d		ECHA
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	DOC removal	96 %	28 d		ECHA
benzaldehyde	100-52-7	DOC removal	100 %	19 d		ECHA
benzaldehyde	100-52-7	oxygen depletion	>60 %	28 d		ECHA
benzaldehyde	100-52-7	carbon dioxide generation	95 %	28 d		ECHA
2-methyl-2H-isothiazol-3-one	2682-20-4	carbon dioxide generation	54.1 %	29 d		ECHA
2-methyl-2H-isothiazol-3-one	2682-20-4	oxygen depletion	0 %	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**
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6		-1.3 (pH value: 5.43, 20 °C)	
Alcohols, C9-11, ethoxylated	68439-46-3	12.7		
benzaldehyde	100-52-7		1.4 (25 °C)	

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
2-methyl-2H-isothiazol-3-one	2682-20-4	5.75	-0.486 (pH value: 7, 25 °C)	

12.4 Mobility in soil

Data are not available.

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 in a concentration of ≥ 0,1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.

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

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**	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

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.

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 as "ACTIVE"

Right to Know Hazardous Substance List

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

Name of substance	CAS No	Functionality	Authoritative Lists
benzaldehyde	100-52-7		CDC 4th National Exposure Report

- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
benzaldehyde	100-52-7	I	

Legend

I	American Industrial Hygiene Association (AIHA), "Workplace Environmental Exposure Level Guides" (1992), available from AIHA

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
benzaldehyde	100-52-7		F2

Legend

F2	Flammable - Second Degree

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

Name acc. to inventory	CAS No	Classification
BENZALDEHYDE	100-52-7	

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
benzaldehyde	100-52-7	F

Legend

F	Flammability (NFPA®)

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
ethylene oxide	75-21-8	0.000175 wt%	cancer
ethylene oxide	75-21-8	0.000175 wt%	female
ethylene oxide	75-21-8	0.000175 wt%	developmental, male

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 as "ACTIVE"

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
2.3	Other hazards: of no significance	Other hazards	yes
2.3		Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance in a concentration of ≥ 0,1%.	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.	yes
9.1	pH (value): 2.5 – 4 (23 °C)	pH (value): 5.5 – 7.5 (23 °C)	yes
12.5	Results of PBT and vPvB assessment: Data are not available.	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 in a concentration of ≥ 0,1%.	yes
12.6	Endocrine disrupting properties: None of the ingredients are listed.	Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.	yes
14.3	Transport hazard class(es): not assigned	Transport hazard class(es): none	yes
15.1	Toxic Substance Control Act (TSCA): all ingredients are listed	Toxic Substance Control Act (TSCA): all ingredients are listed as "ACTIVE"	yes
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK)	yes
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK): change in the listing (table)	yes
15.1		California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987	yes
15.1		Proposition 65 List of chemicals: change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
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
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
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
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
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
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Regulation 833	R.R.O. 1990, Reg. 833: Control of exposure to biological or chemical agents (Ontario)
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)

Abbr.	Descriptions of used abbreviations
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
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.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.

Disclaimer

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