

### SECTION 1 Identification

#### 1.1. GHS Product identifier

Product form : Mixture  
Trade name : D/E Neutralizing Broth with Tween  
Type of product : Food Safety -- [Food Safety]  
Product code : NCM0047

#### 1.2. Other means of identification

Part Number(s) : NCM0047|400000764|700003085|700003086|700003087

#### 1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laboratory chemicals, Scientific research and development

#### 1.4. Supplier's details

Neogen Corporation  
620 Leshar Place  
Lansing, Michigan 48912  
United States of America  
T 800.234.5333  
[sds@neogen.com](mailto:sds@neogen.com) - <https://www.neogen.com/>

#### 1.5. Emergency phone number

Emergency number : 24 hours:  
Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international)  
Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)

### SECTION 2 Hazard identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS CA)

Acute toxicity (oral), Category 4	H302	Harmful if swallowed
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation
Skin sensitization, Category 1	H317	May cause an allergic skin reaction

Full text of H statements : see section 16

#### 2.2. GHS label elements, including precautionary statements

##### GHS CA labeling

Hazard pictograms (GHS CA) :



Signal word (GHS CA) : Warning

Hazard statements (GHS CA) : H302 - Harmful if swallowed  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation

Precautionary statements (GHS CA) : P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.

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P272 - Contaminated work clothing should not be allowed out of the workplace.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.  
P301+P312 - IF SWALLOWED: Call a POISON CENTER or a doctor if you feel unwell.  
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.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P330 - Rinse mouth.  
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.  
P337+P313 - If eye irritation persists: Get medical advice or attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

### 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3 Composition/information on ingredients

### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium thiosulfate, anhydrous	Sodium thiosulfate ametox (=sodium thiosulfate) / antichlor (=sodium thiosulfate) / chlorine control / chlorine cure / declor-IT / disodium thiosulfate / HYPO (=sodium thiosulfate) / prismatic rice / S-hydril / sodium hyposulfite / sodium hyposulphite / sodium oxide sulfide / sodium thiosulfate / sodium thiosulphate / sodothiol (=sodium thiosulfate) / sulfothiorine (=sodium thiosulfate) / thiosulfuric acid (H <sub>2</sub> -S <sub>2</sub> -O <sub>3</sub> ), disodium salt / thiosulfuric acid disodium salt	CAS-No.: 7772-98-7	15.376	Acute Tox. 4 (Inhalation:dust,mist), H332

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Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.	(Z)-Mono-9-octadecenoate sorbitan poly(oxy-1,2-ethanediyl) derivs. ; Polyoxyethylene sorbitan monooleate alkamuls PSMO 20 / armotan PMO-20 / atlox 1087 / atlox 8916TF / capmul POE-O / cemerol T 80 / cemesol TW 1020 / crill 10 / crill 11 / crill S 10 / crillet 4 / crillet 41 / disponil SMO 120 / drewmulse POE-SMO / durfax 80 / emsorb 6900 / emulgin SMO 20 / emulson 100M / ethoxylated sorbitan monooleate / ethylene oxide-sorbitan monooleate polymer / flo Mo SMO 20 / glycols, polyethylene, ether with sorbitan monooleate / glycosperse O 5 / glycosperse O-20 / glycosperse O-20 VEG / glycosperse O-20X / hexaethylene glycol sorbitan monooleate / hodag SVO 9 / ionet T80 / ionet T80C / liposorb O-20 / liposord L-20 / MO 55F / monitan / montanox 80 / nikkol TO / nikkol TO 10 / nikkol TO 106 / nikkol TO 10M / nissan	CAS-No.: 9005-65-6	12.821	Aquatic Acute 3, H402 Aquatic Chronic 3, H412
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	nonion OT 221 / nonion OT 221 / clothorb / polyethylene glycol sorbitan ether monooleate / polyethylene glycol sorbitan monooleate / polyethylene oxide sorbitan mono-oleate / polyoxyethylated sorbitan monooleate / polyoxyethylene (20) sorbitan monooleate / polyoxyethylene monosorbitan monooleate / polyoxyethylene sorbitan oleate / polyoxyethylene sorbitanmonoolea te / polyoxyethylene(2 0)sorbitan monooleate / protasorb O-20 / PST40200 / rheodol super TW-O120 / rheodol TW-L 80 / rheodol TW-O 106 / rheodol TW- O 120 / romulgin O / setrolene O / sorbimacrogol oleate / sorbimacrogol oleate 300 / sorbital 0 20 / sorbitan mono-9- octadecenoate poly(oxy-1,2- ethanediyl) derives / sorbitan monooleate / sorbitan monooleate ethylene oxide adduct / sorbitan monooleate polyethylene glycol ether / sorbitan mono-			
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Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
	oleate polyoxyethylene / sorbitan monooleate polyoxyethylene derivatives / sorbitan monooleate polyoxyethylene ether / Sorbitan monooleate, ethoxylated / sorbitan oleate-ethylene oxide adduct / sorbitan, mono-9-octadecenoate, poly(oxy-1,2-ethanediyl) der / sorbitan, monooleate, polyoxyethylene derivs. / sorbon T 80 / sorethytan (20) mono-oleate / sorgem TW 80 / sorlate / SVO 9 / T-164 / TO 10 / TO 10M / tris(polyoxyethylene)sorbitan monooleate / TWEEN 18:1c / TWEEN 81 / TWEEN 81 (polysorbate 81) / witconol 2722			
Sodium bisulfite	Sodium hydrogensulfite sodium bisulphite / sodium hydrogensulfite / sodium hydrogensulphite / sulfurous acid, monosodium salt	CAS-No.: 7631-90-5	6.407	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319

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Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium carbonate	Sodium Carbonate anhydrous soda / ash / bisodium carbonate / calcined soda(=sodium carbonate) / carbonic acid sodium salt / carbonic-acid-disodium-salt- / CASWELL NO. 752 / chrysol carbonate / crystol carbonate (=sodium carbonate) / natural ash / Na-X / snowlite 1 / soda (=sodium carbonate) / soda ash / soda, crystals / sodium carbonate / sodium carbonate, anhydrous / sodium carbonate, anhydrous ASTM D458 / sodium carbonate, anhydrous GE materials D4D5 / sodium carbonate, anhydrous powder / sodium carbonate, crude / sodium carbonate, granular / Solvay soda / synthetic ash / washing soda (=sodiumcarbonate)	CAS-No.: 497-19-8	3.844	Eye Irrit. 2, H319

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Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium thioglycollate	Thioglycolic acid sodium salt acetic acid, mercapto-, monosodium salt / mercaptoacetic acid, monosodium salt / mercaptoacetic acid, sodium salt / NaTG / sodium mercaptoacetate / sodium thioglycollate / thioglycolic acid, sodium salt / USAF EK5199	CAS-No.: 367-51-1	2.562	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Skin Sens. 1, H317 Aquatic Chronic 3, H412

### SECTION 4 First-aid measures

#### 4.1. Description of necessary first-aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.
First-aid measures general	: Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.

#### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
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### SECTION 5 Fire-fighting measures

#### 5.1. Suitable extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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### 5.3. Special protective actions for fire-fighters

- Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6 Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
- Environmental precautions : Avoid release to the environment.

### 6.2. Methods and materials for containment and cleaning up

- For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.
- Methods for cleaning up : Mechanically recover the product.
- Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

## SECTION 7 Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep in a cool, well-ventilated place away from heat.
- Storage conditions : Keep cool. Protect from sunlight.
- Storage temperature : 2 – 8 °C
- Packaging materials : Store always product in container of same material as original container.

## SECTION 8 Exposure controls/personal protection

### 8.1. Control parameters

Sodium bisulfite (7631-90-5)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Sodium bisulfite
OEL TWA	5 mg/m <sup>3</sup>
Notations and remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Regulatory reference	Alberta Regulation 191/2021

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<b>Sodium bisulfite (7631-90-5)</b>	
<b>Canada (Quebec) - Occupational Exposure Limits</b>	
Local name	Sodium bisulfite
VEMP (OEL TWAEV)	5 mg/m <sup>3</sup>
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
<b>Canada (British Columbia) - Occupational Exposure Limits</b>	
Local name	Sodium bisulfite
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
<b>Canada (Manitoba) - Occupational Exposure Limits</b>	
Local name	Sodium bisulfite
OEL TWA	5 mg/m <sup>3</sup>
Notations and remarks	TLV® Basis: Skin, eye, & URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024
<b>Canada (New Brunswick) - Occupational Exposure Limits</b>	
Local name	Sodium bisulfite
OEL TWA	5 mg/m <sup>3</sup>
Notations and remarks	Skin, eye, & URT irr
<b>Canada (Newfoundland and Labrador) - Occupational Exposure Limits</b>	
Local name	Sodium bisulfite
OEL TWA	5 mg/m <sup>3</sup>
Notations and remarks	TLV® Basis: Skin, eye, & URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024
<b>Canada (Nova Scotia) - Occupational Exposure Limits</b>	
Local name	Sodium bisulfite
OEL TWA	5 mg/m <sup>3</sup>
Notations and remarks	TLV® Basis: Skin, eye, & URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024
<b>Canada (Nunavut) - Occupational Exposure Limits</b>	
Local name	Sodium bisulphite
OEL TWA	5 mg/m <sup>3</sup>
OEL STEL	10 mg/m <sup>3</sup>
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
<b>Canada (Northwest Territories) - Occupational Exposure Limits</b>	
Local name	Sodium bisulphite
OEL TWA	5 mg/m <sup>3</sup>
OEL STEL	10 mg/m <sup>3</sup>
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)

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Sodium bisulfite (7631-90-5)	
<b>Canada (Ontario) - Occupational Exposure Limits</b>	
Local name	Sodium bisulfite
OEL TWAEV	5 mg/m <sup>3</sup>
Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
<b>Canada (Prince Edward Island) - Occupational Exposure Limits</b>	
Local name	Sodium bisulfite
OEL TWA	5 mg/m <sup>3</sup>
Notations and remarks	TLV® Basis: Skin, eye, & URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024
<b>Canada (Saskatchewan) - Occupational Exposure Limits</b>	
Local name	Sodium bisulphite
OEL TWA	5 mg/m <sup>3</sup>
OEL STEL	10 mg/m <sup>3</sup>
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Personal protective equipment symbol(s):



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### SECTION 9 Physical and chemical properties

#### 9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Color	: Light gray light blue
Odor	: unpleasant odor
Odor threshold	: No data available
pH	: 7.4 – 7.8
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: Not applicable
Explosion limits	: Not applicable
Particle characteristics	: No data available

#### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

### SECTION 10 Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).
Incompatible materials	: No additional information available
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time:	: No additional information available

### SECTION 11 Toxicological information

#### 11.1. Likely routes of exposure

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified.

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ATE CA (oral)	948.717 mg/kg body weight
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<b>D/E Neutralizing Broth with Tween</b>	
Unknown acute toxicity (GHS CA)	46.13% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 74.32% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 61.51% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
<b>Sodium thiosulfate, anhydrous (7772-98-7)</b>	
LD50 oral rat	> 5000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Read-across, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 2.6 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (aerosol), 14 day(s))
ATE CA (dust,mist)	1.5 mg/l/4h
<b>Sodium bisulfite (7631-90-5)</b>	
LD50 oral rat	1540 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Read-across, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Read-across, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5.5 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (dust), 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	> 5.5 mg/l Source: ECHA
ATE CA (oral)	1540 mg/kg body weight
<b>Sodium carbonate (497-19-8)</b>	
LD50 oral rat	2800 mg/kg (Rat, Male / female, Experimental value of similar product, Hydrate form, Oral, 14 day(s))
LD50 oral	2800 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (16 CFR 1500.40, 24 h, Rabbit, Experimental value of similar product, Hydrate form, Dermal, 14 day(s))
LD50 dermal	2500 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1.2 mg/l/4h
ATE CA (oral)	2800 mg/kg body weight
ATE CA (Dermal)	2500 mg/kg body weight
ATE CA (dust,mist)	1.2 mg/l/4h
<b>Sodium thioglycollate (367-51-1)</b>	
LD50 oral rat	50 – 200 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male / female, Experimental value, Oral, 15 day(s))
LD50 dermal rat	1000 – 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Female, Experimental value, Dermal, 14 day(s))
ATE CA (oral)	50 mg/kg body weight
ATE CA (Dermal)	1000 mg/kg body weight

Skin corrosion/irritation : Not classified.  
pH: 7.4 – 7.8

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<b>Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)</b>	
pH	5 – 7 (5 %)
<b>Sodium thiosulfate, anhydrous (7772-98-7)</b>	
pH	7.8 (10 %)
<b>Sodium bisulfite (7631-90-5)</b>	
pH	4.1 (42 %, 20 °C)
<b>Sodium thioglycollate (367-51-1)</b>	
pH	7 (609.1 g/l, 20 °C, OECD 105: Water Solubility)

Serious eye damage/irritation : Causes serious eye irritation.  
pH: 7.4 – 7.8

<b>Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)</b>	
pH	5 – 7 (5 %)
<b>Sodium thiosulfate, anhydrous (7772-98-7)</b>	
pH	7.8 (10 %)
<b>Sodium bisulfite (7631-90-5)</b>	
pH	4.1 (42 %, 20 °C)
<b>Sodium thioglycollate (367-51-1)</b>	
pH	7 (609.1 g/l, 20 °C, OECD 105: Water Solubility)

Respiratory or skin sensitization : May cause an allergic skin reaction.  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

<b>Sodium bisulfite (7631-90-5)</b>	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

<b>Sodium thioglycollate (367-51-1)</b>	
LOAEL (oral,rat,90 days)	60 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEL (dermal,rat/rabbit,90 days)	11.25 mg/kg body weight Animal: rat, Guideline: other., Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
NOAEL (oral,rat,90 days)	20 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal,rat/rabbit,90 days)	≥ 180 mg/kg body weight Animal: rat, Guideline: other., Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard : Not classified

<b>D/E Neutralizing Broth with Tween</b>	
Viscosity, kinematic	Not applicable
<b>Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)</b>	
Viscosity, kinematic	462.963 – 46648.148 mm <sup>2</sup> /s

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<b>Sodium bisulfite (7631-90-5)</b>	
Viscosity, kinematic	Not applicable (solid)
<b>Sodium carbonate (497-19-8)</b>	
Viscosity, kinematic	Not applicable (solid)
<b>Sodium thioglycollate (367-51-1)</b>	
Viscosity, kinematic	Not applicable (solid)
Symptoms/effects after inhalation	: None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.

## SECTION 12 Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified.

<b>Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)</b>	
LC50 - Fish [1]	817.89 mg/l Source: ECOSAR
EC50 96h - Algae [1]	62.072 mg/l Source: ECOSAR
<b>Sodium thiosulfate, anhydrous (7772-98-7)</b>	
LC50 - Fish [1]	510 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Read-across, Lethal)
EC50 - Crustacea [1]	230 mg/l (48 h, Daphnia magna, Static system, Fresh water, Read-across, Locomotor effect)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, Growth rate)
NOEC chronic fish	≥ 316 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'
NOEC (chronic)	> 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
<b>Sodium bisulfite (7631-90-5)</b>	
LC50 - Fish [1]	464 – 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Read-across, Lethal)
EC50 - Crustacea [1]	230 mg/l (48 h, Daphnia magna, Static system, Fresh water, Read-across, Locomotor effect)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, Growth rate)
NOEC chronic fish	≥ 316 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'
NOEC (chronic)	> 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
<b>Sodium carbonate (497-19-8)</b>	
LC50 - Fish [1]	300 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)

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<b>Sodium carbonate (497-19-8)</b>	
EC50 - Crustacea [1]	200 – 227 mg/l (48 h, Ceriodaphnia sp., Semi-static system, Fresh water, Experimental value, Locomotor effect)
EC50 - Crustacea [2]	200 – 227 mg/l Test organisms (species): Ceriodaphnia sp.
EC50 96h - Algae [1]	242 mg/l Source: ECOTOX
<b>Sodium thioglycollate (367-51-1)</b>	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across, GLP)
EC50 - Crustacea [1]	47.31 mg/l (48 h, Daphnia magna, Experimental value, Locomotor effect)
EC50 - Other aquatic organisms [1]	47.31 mg/l Test organisms (species):
ErC50 algae	5.07 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Read-across, GLP)
EC50 72h - Algae [1]	5.07 mg/l Test organisms (species):
NOEC (chronic)	3.9 mg/l Test organisms (species): Duration: '21 d'

### 12.2. Persistence and degradability

<b>D/E Neutralizing Broth with Tween</b>	
Persistence and degradability	Not rapidly degradable
<b>Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)</b>	
Persistence and degradability	Biodegradability in water: no data available.
<b>Sodium thiosulfate, anhydrous (7772-98-7)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>Sodium bisulfite (7631-90-5)</b>	
Persistence and degradability	Biodegradability in water: no data available.
<b>Sodium carbonate (497-19-8)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>Sodium thioglycollate (367-51-1)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>12.3. Bioaccumulative potential</b>	
<b>Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>Sodium thiosulfate, anhydrous (7772-98-7)</b>	
Bioaccumulative potential	No bioaccumulation data available.

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Sodium thiosulfate, anhydrous (7772-98-7)	
Partition coefficient n-octanol/water (Log Pow)	-4.35 Source: International Chemical Safety Cards
Sodium bisulfite (7631-90-5)	
Bioaccumulative potential	Not bioaccumulative.
Sodium carbonate (497-19-8)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-6.19 Source: Quantitative Structure Activity Relation
Sodium thioglycollate (367-51-1)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-2.99 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 22 °C)

### 12.4. Mobility in soil

Sodium bisulfite (7631-90-5)	
Surface tension	No data available in the literature
Ecology - soil	Low potential for adsorption in soil.
Sodium carbonate (497-19-8)	
Surface tension	No data available in the literature
Ecology - soil	Low potential for adsorption in soil.
Sodium thioglycollate (367-51-1)	
Surface tension	No data available in the literature
Ecology - soil	Highly mobile in soil.
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.16 (log Koc, SRC PCKOCWIN v2.0, QSAR)

### 12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

## SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

## SECTION 14 Transport information

In accordance with TDG / DOT / IMDG / IATA

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according to the Hazardous Products Regulation (WHMIS 2015)

TDG	DOT	IMDG	IATA
<b>14.1. UN Number</b>			
Not regulated for transport			
<b>14.2. UN Proper Shipping Name</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group, if applicable</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

### 14.6. Special precautions for user

#### TDG

Not regulated

#### DOT

Not regulated

#### IMDG

Not regulated

#### IATA

Not regulated

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78<sup>9</sup> and the IBC Code<sup>10</sup>

Not applicable

## SECTION 15 Regulatory information

### Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)

Listed on the Canadian DSL (Domestic Substances List)

### Sodium thiosulfate, anhydrous (7772-98-7)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAc) provisions of the Act apply

### Sodium bisulfite (7631-90-5)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAc) provisions of the Act apply

### Sodium carbonate (497-19-8)

Listed on the Canadian DSL (Domestic Substances List)

# D/E Neutralizing Broth with Tween

## Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

### Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9005-65-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### Sodium thiosulfate, anhydrous (7772-98-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### Sodium bisulfite (7631-90-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### Sodium carbonate (497-19-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

## SECTION 16 Other Information

Issue date : 05-21-2025

### Full text of hazard classes and H-statements:

H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), Canada

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.