

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture
Trade name : Neutralizing Buffered Peptone Water Complete
Type of product : Food Safety -- [Food Safety]
Product code : 9035

1.2. Other means of identification

Part Number(s) : 9035|400000561|700002652|700002653

1.3. Recommended use of the chemical and restrictions on use

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

1.4. Supplier's details

Neogen Corporation
620 Leshar Place
Lansing, Michigan 48912
United States of America
T 800.234.5333
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 (inhalation:dust,mist), Category 4 H332 Harmful if inhaled.
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) : H332 - Harmful if inhaled

Precautionary statements (GHS CA) : P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.
P271 - Use only outdoors or in a well-ventilated area.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 - Call a POISON CENTER or a doctor if you feel unwell.

Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium bicarbonate	Sodium Bicarbonate ALKAKARB / B781 / baking soda / BICAR / bicarbonate of soda / C: Natron (= sodium bicarbonate) / carbonic-acid- monosodium-salt- / COL EVAC / colevac / DESSIKARB / JUSONIN / monosodium carbonate / NEUT / SODA BICARB / SODA MINT / sodium hydrogen carbonate / sodium hydrogencarbonat e	CAS-No.: 144-55-8	≥ 25 – < 50	Acute Tox. 4 (Inhalation:dust,mist), H332

Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium thiosulfate, anhydrous	Sodium thiosulfate ametox (=sodium thiosulfate) / antichlor (=sodium thiosulfate) / chlorine control / chlorine cure / dechlor-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 ₂ -S ₂ -O ₃), disodium salt / thiosulfuric acid disodium salt	CAS-No.: 7772-98-7	≥ 1 – < 5	Acute Tox. 4 (Inhalation:dust,mist), H332

Full text of hazard classes and H-statements : see section 16

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. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.
First-aid measures general	: Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders.	: First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: Harmful if inhaled.
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Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Symptoms/effects after skin contact	: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	: None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

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.

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	: Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures	: 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 – 30 °C
Packaging materials	: Store always product in container of same material as original container.

Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

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 inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Color	: Beige
Odor	: Characteristic
Odor threshold	: No data available
pH	: 7.2 – 8.2
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.

Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Inhalation:dust,mist: Harmful if inhaled.

Neutralizing Buffered Peptone Water Complete	
ATE CA (dust,mist)	3.167 mg/l/4h
Unknown acute toxicity (GHS CA)	32.09% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 32.09% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 29.62% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
Sodium bicarbonate (144-55-8)	
LD50 oral rat	> 4000 mg/kg (FIFRA (40 CFR), Rat, Male / female, Experimental value, Oral)
LD50 oral	7334 mg/kg
LD50 dermal	2500 mg/kg
LC50 Inhalation - Rat	> 4.74 mg/l (EPA OTS 798.1150: Acute inhalation toxicity, 4.5 h, Rat, Male / female, Experimental value, Inhalation, 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	5.33 mg/l/4h
ATE CA (oral)	7334 mg/kg body weight
ATE CA (Dermal)	2500 mg/kg body weight
ATE CA (dust,mist)	1.5 mg/l/4h

Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Sodium thiosulfate, anhydrous (7772-98-7)	
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

Skin corrosion/irritation : Not classified.
pH: 7.2 – 8.2

Sodium bicarbonate (144-55-8)	
pH	8 (5 %)

Sodium thiosulfate, anhydrous (7772-98-7)	
pH	7.8 (10 %)

Serious eye damage/irritation : Not classified
pH: 7.2 – 8.2

Sodium bicarbonate (144-55-8)	
pH	8 (5 %)

Sodium thiosulfate, anhydrous (7772-98-7)	
pH	7.8 (10 %)

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Sodium bicarbonate (144-55-8)	
NOAEL (oral,rat,90 days)	6400 mg/kg body weight Animal: rat, Animal sex: male

Aspiration hazard : Not classified

Neutralizing Buffered Peptone Water Complete	
Viscosity, kinematic	Not applicable

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion : None under normal conditions.

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

Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Hazardous to the aquatic environment, long-term : Not classified
(chronic)

Sodium bicarbonate (144-55-8)	
LC50 - Fish [1]	7100 mg/l (EPA OPP 72-1, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	4100 mg/l (EPA OPP 72-2, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value, GLP)
NOEC chronic fish	400 mg/l Test organisms (species): Pimephales promelas Duration: '30 d'
NOEC (chronic)	> 576 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

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

12.2. Persistence and degradability

Neutralizing Buffered Peptone Water Complete	
Persistence and degradability	Not rapidly degradable

Sodium bicarbonate (144-55-8)	
Persistence and degradability	Biodegradability: not applicable.
ThOD	Not applicable (inorganic)

Sodium thiosulfate, anhydrous (7772-98-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Sodium bicarbonate (144-55-8)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-4.01 (Estimated value)

Sodium thiosulfate, anhydrous (7772-98-7)	
Bioaccumulative potential	No bioaccumulation data available.
Partition coefficient n-octanol/water (Log Pow)	-4.35 Source: International Chemical Safety Cards

Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

12.4. Mobility in soil

Sodium bicarbonate (144-55-8)

Ecology - soil	No (test)data on mobility of the substance available.
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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

TDG	DOT	IMDG	IATA
14.1. UN Number			
Not regulated for transport			
14.2. UN Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group, if applicable			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
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

Neutralizing Buffered Peptone Water Complete

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

14.7. Transport in bulk according to Annex II of MARPOL 73/78⁹ and the IBC Code¹⁰

Not applicable

SECTION 15 Regulatory information

Sodium bicarbonate (144-55-8)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAC) provisions of the Act apply

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 bicarbonate (144-55-8)

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)

SECTION 16 Other Information

Issue date : 05-09-2025

Revision date : 08-14-2025

Supersedes : 05-09-2025

Full text of hazard classes and H-statements:

H332

Harmful if inhaled

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.