Veratox® for Total Milk Allergen

Kit Product

Kit identification

Trade name	:	Veratox® for Total Milk Allergen
Product code	:	8470
Part Number(s)	:	8470|700002577

Details of the supplier of the Kit safety information sheet

Manufacturer
Neogen Corporation
620 Lesher Place Lansing 48912 Michigan United States of America
T 800.234.5333
sds@neogen.com - https://www.neogen.com/

General information

Restrictions on use	:	Do not use kit components from one kit with any other kit.
General description	:	This is a test kit that is comprised of several individual components, listed below, each of which may have its own Safety Data Sheet (SDS). Articles, and otherwise immobilized and inaccessible chemicals, do not have a Safety Data Sheet in this packet.

Kit contents

Name	GHS classification
Total Milk Allergen-HRP Conjugate	Skin Sens. 1, H317
Total Milk Allergen Multi-Level Controls	Not classified
K-Blue® Advanced Plus TMB Substrate	Not classified
Red Stop Solution	Not classified
Wash Buffer Concentrate, 25X	Not classified
Phosphate Buffered Saline, Foil Pouch	Not classified

Transport information

In accordance with IMDG / IATA / UN RTDG

IMDG	IATA	UNRTDG
UN number		
Not regulated for transport		
Proper Shipping Name		
Not regulated	Not regulated	Not regulated

IMDG	IATA	UNRTDG
Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
Packing group		
Not regulated	Not regulated	Not regulated
Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

Special precautions for user

UN RTDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 1: Identification

1.1. Product identifier

Trade name : Total Milk Allergen Multi-Level Controls
Name : Total Milk Allergen Multi-Level Controls 8470

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Scientific research and development,Laboratory chemicals
Restrictions on use : Do not use kit components from one kit with any other kit.

1.4. Details of the supplier of the safety data sheet

Manufacturer
Neogen Corporation
620 Lesher Place Lansing 48912 Michigan United States of America
T 800.234.5333
sds@neogen.com - https://www.neogen.com/

1.5. Emergency telephone 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: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

No additional information available

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS PH classification
Water	CAS-No.: 7732-18-5	≥ 75	Not classified
Sodium chloride	CAS-No.: 7647-14-5	≥ 0.5 – < 1	Not classified
Gelatin	CAS-No.: 9000-70-8	≥ 0.1 – < 0.5	Not classified
Disodium phosphate	CAS-No.: 7558-79-4	≥ 0.1 – < 0.5	Not classified
Dipropylene glycol	CAS-No.: 25265-71-8	< 0.1	Acute Tox. 4 (Inhalation:dust,mist), H332
Sodium phosphate monobasic monohydrate	CAS-No.: 10049-21-5	< 0.1	Eye Irrit. 2A, H319 STOT SE 3, H335

Name	Product identifier	%	GHS PH classification
1,2-Benzisothiazol-3(2H)-one	CAS-No.: 2634-33-5	< 0.1	Acute Tox. 4 (Oral), H302 Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Chronic 1, H410
Sodium hydroxide pellets	CAS-No.: 1310-73-2	< 0.1	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1, H314 Eye Dam. 1, H318
Whey powder	CAS-No.: 68514-61-4	< 0	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

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.

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.

Personal protection for first-aid responders. : First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : None under normal conditions.

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

5.3. Advice for firefighters

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 : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

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 – 8 °C

Packaging materials : Always store product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium hydroxide pellets (1310-73-2)	
Philippines - Occupational Exposure Limits	
Local name	Sodium Hydroxide
OEL TWA	2 mg/m³
Regulatory reference	Occupational Safety And Health Standards Philippines

Exposure limit values of other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

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):

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Aqueous solution.

Color : Clear,Colorless
Odor : Odorless,Slight

Odor threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability : 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 Kow) : No data available
Viscosity, kinematic : No data available
Explosion limits : No data available
Lower explosive limit (LEL) : No data available
Upper explosive limit (UEL) : No data available

9.2. Other information

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

SECTION 11: Toxicological information

11.1. Acute toxicity

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Water (7732-18-5)	
LD50 oral rat	90000 mg/kg

Sodium chloride (7647-14-5)	
LD50 oral rat	> 3980 mg/kg body weight (Rat, Experimental value, 20 % aqueous solution, Oral)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	> 42 mg/l air (1 h, Rat, Male, Experimental value, 20 % aqueous solution, Inhalation (aerosol))
LC50 Inhalation - Rat (Dust/Mist)	> 10.5 mg/l Source: Corporate Solution From Thomson Micromedex

Disodium phosphate (7558-79-4)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 0.83 mg/l air Animal: rat, Guideline: EPA OPP 81-3 (Acute inhalation toxicity), Guideline: other:, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: other:

Sodium phosphate monobasic monohydrate (10049-21-5)	
LD50 oral rat	8290 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)

Dipropylene glycol (25265-71-8)	
LD50 oral rat	> 5000 mg/kg body weight (EPA OPP 81-1: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5010 mg/kg body weight (EPA OPP 81-2, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 2.34 mg/l (EPA OPP 81-3: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, (maximum achievable concentration), Inhalation (aerosol), 14 day(s))

1,2-Benzisothiazol-3(2H)-one (2634-33-5)	
LD50 oral rat	490 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	670 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal	2500 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	0.21 mg/l/4h
LC50 Inhalation - Rat (Vapors)	0.25 mg/l

Sodium hydroxide pellets (1310-73-2)	
LD50 oral	325 mg/kg
LD50 dermal rabbit	1350 mg/kg

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

1,2-Benzisothiazol-3(2H)-one (2634-33-5)	
NOAEL (animal/female, F0/P)	112 mg/kg body weight Animal: rat, Animal sex: female, Guideline: EPA OPPTS 870.3800 (Reproduction and Fertility Effects)
NOAEL (animal/female, F1)	56.6 mg/kg body weight Animal: rat, Animal sex: female, Guideline: EPA OPPTS 870.3800 (Reproduction and Fertility Effects)

Specific target organ toxicity – single exposure : Not classified

Sodium phosphate monobasic monohydrate (10049-21-5)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : Not classified

Disodium phosphate (7558-79-4)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

1,2-Benzisothiazol-3(2H)-one (2634-33-5)	
NOAEL (oral,rat,90 days)	50 mg/kg bw/day
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Ecotoxicity

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.

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Sodium chloride (7647-14-5)	
LC50 - Fish [1]	5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
LOEC (chronic)	441 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'
NOEC (chronic)	314 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'

Disodium phosphate (7558-79-4)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	564000000 mg/l Source: Ecological Structure Activity Relationships
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards

Sodium phosphate monobasic monohydrate (10049-21-5)	
LC50 - Fish [1]	> 2400 mg/l (48 h, Leuciscus idus, Anhydrous form)

Dipropylene glycol (25265-71-8)	
LC50 - Fish [1]	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, Nominal concentration)
LC50 - Fish [2]	> 1000 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Measured concentration)
EC50 96h - Algae [1]	1064.8 mg/l Source: ECOTOX
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Fresh water, Experimental value, Nominal concentration)
Partition coefficient n-octanol/water (Log Pow)	-0.46 (Test data, Equivalent or similar to OECD 107, 21.7 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.78 (log Koc, Calculated value)

1,2-Benzisothiazol-3(2H)-one (2634-33-5)	
LC50 - Fish [1]	2.2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Experimental value, Nominal concentration)
LC50 - Fish [2]	2.15 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2.9 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value, Lethal)
EC50 - Crustacea [2]	2.9 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.51 mg/l
ErC50 algae	150 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Experimental value, GLP)
NOEC chronic algae	0.0403 mg/l
BCF - Fish [1]	6.6 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 1 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)

1,2-Benzisothiazol-3(2H)-one (2634-33-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)

Sodium hydroxide pellets (1310-73-2)	
LC50 - Fish [1]	189 mg/l (48 h, Leuciscus idus, Fresh water, Experimental value)
EC50 - Crustacea [1]	40 mg/l (48 h, Ceriodaphnia sp., Experimental value, Locomotor effect)
Partition coefficient n-octanol/water (Log Pow)	-3.88 Source: SRC

12.2. Persistence and degradability

Total Milk Allergen Multi-Level Controls	
Persistence and degradability	Not rapidly degradable

Water (7732-18-5)	
Persistence and degradability	Not rapidly degradable

Sodium chloride (7647-14-5)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Disodium phosphate (7558-79-4)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Gelatin (9000-70-8)	
Persistence and degradability	Readily biodegradable in water.

Sodium phosphate monobasic monohydrate (10049-21-5)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Dipropylene glycol (25265-71-8)	
Persistence and degradability	Readily biodegradable in water.

1,2-Benzisothiazol-3(2H)-one (2634-33-5)	
Persistence and degradability	Not readily biodegradable in water.

Sodium hydroxide pellets (1310-73-2)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Whey powder (68514-61-4)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Total Milk Allergen Multi-Level Controls	
Bioaccumulative potential	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Sodium chloride (7647-14-5)	
Bioaccumulative potential	Not bioaccumulative.

Disodium phosphate (7558-79-4)	
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards
Bioaccumulative potential	Not bioaccumulative.

Sodium phosphate monobasic monohydrate (10049-21-5)	
Bioaccumulative potential	No bioaccumulation data available.

Dipropylene glycol (25265-71-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.46 (Test data, Equivalent or similar to OECD 107, 21.7 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.78 (log Koc, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

1,2-Benzisothiazol-3(2H)-one (2634-33-5)	
BCF - Fish [1]	6.6 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 1 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Sodium hydroxide pellets (1310-73-2)	
Partition coefficient n-octanol/water (Log Pow)	-3.88 Source: SRC
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Total Milk Allergen Multi-Level Controls	
Mobility in soil	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Sodium chloride (7647-14-5)	
Surface tension	73.03 mN/m (23 °C, 14.5 g/l)
Ecology - soil	No (test)data on mobility of the substance available.

Disodium phosphate (7558-79-4)	
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards
Ecology - soil	No (test)data on mobility of the substance available.

Dipropylene glycol (25265-71-8)	
Surface tension	71.4 mN/m (22 °C, 1.01 g/l, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Pow)	-0.46 (Test data, Equivalent or similar to OECD 107, 21.7 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.78 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

1,2-Benzisothiazol-3(2H)-one (2634-33-5)	
Surface tension	72.6 mN/m (20 °C, 0.1 %, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 1 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.

Sodium hydroxide pellets (1310-73-2)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	-3.88 Source: SRC
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

IMDG	IATA	UNRTDG
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated

IMDG	IATA	UNRTDG
No supplementary information available		

14.6. Special precautions for user

UN RTDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Priority Chemical List (PCL) and Chemical Control Orders (CCO)		
Initial List of Single Substances and Compounds Covered under Chemical Control Order (CCO) and Priority Chemical List (PCL) DENR Administrative Order 2015-09	Not applicable	
Priority Chemical List DENR Administrative Order 2005-27	Not applicable	
Chemical Control Orders	Not applicable	
Chemical Control Order for Ozone Depleting Substances	Not applicable	

Others		
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Applicable	CRAON 17-502 (7732-18-5) SODIUM CHLORIDE (7647-14-5) Di-Sodium Hydrogen Phosphate (7558-79-4) ANIMAL GLUE (9000-70-8) Phosphoric acid, monosodium salt, monohydrate (10049-21-5) DIPROPYLENE GLYCOL (25265-71-8) 1,2-Benzisothiazol-3(2H)-one (2634-33-5) ANHYDROUS (CAUSTIC SODA) (1310-73-2) Milk, skim, hydrolyzed (68514-61-4)
Controlled Chemical for Manufacture of Explosives or Explosives Ingredients Presidential Decree No.1866	Not applicable	
Comprehensive Dangerous Drugs Act of 2002	Not applicable	
Fertilizers and Pesticides Regulation (Decree No. 1144)	Not applicable	
Food Additives Regulation	Enzymes permitted for use in food	Sodium chloride (7647-14-5) Disodium phosphate (7558-79-4)
	Additives approved only for use as food processing	Sodium hydroxide pellets (1310-73-2)

Others		
Management of Hazardous Waste (Republic Act No. 6969)	Not applicable	
Philippines Clean Air Act	Not applicable	
High Volume Chemicals List	Applicable	Sodium chloride (7647-14-5) Disodium phosphate (7558-79-4) Sodium hydroxide (1310-73-2)

15.2. International regulations

No additional information available

SECTION 16: Other information

Version	:	2.0
Issue date	:	11/08/2025
Revision date	:	19/06/2026
Supersedes	:	11/08/2025

Safety Data Sheet (SDS), Philippines

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.

SECTION 1: Identification

1.1. Product identifier

Trade name : Total Milk Allergen-HRP Conjugate
Name : Total Milk Allergen-HRP Conjugate 8470

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Scientific research and development,Laboratory chemicals
Restrictions on use : Do not use kit components from one kit with any other kit.

1.4. Details of the supplier of the safety data sheet

Manufacturer
Neogen Corporation
620 Lesher Place Lansing 48912 Michigan United States of America
T 800.234.5333
sds@neogen.com - https://www.neogen.com/

1.5. Emergency telephone 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: Hazards identification

2.1. Classification of the substance or mixture

Skin sensitization, Category 1 H317

2.2. Label elements

Hazard pictograms (GHS PH) :

Signal word (GHS PH) : Warning
Contains : Proprietary Enzyme
Hazard statements (GHS PH) : H317 - May cause an allergic skin reaction
Precautionary statements (GHS PH) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....
P302+P352 - IF ON SKIN: Wash with plenty of water.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P317 - If skin irritation or rash occurs: Get medical help.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS PH classification
Proprietary Enzyme	-	≥ 50 – < 75	Skin Sens. 1, H317
Water	CAS-No.: 7732-18-5	≥ 25 – < 50	Not classified
Caseins, hydrolyzates	CAS-No.: 65072-00-6	≥ 0.1 – < 0.5	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

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 eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

Personal protection for first-aid responders. : First-aiders should consider self-protection and use the recommended personal protective equipment (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

5.3. Advice for firefighters

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 : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material.

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 : Always store product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Exposure limit values of other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

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):

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Solution.

Color : Clear,Amber
Odor : Odourless,Slight

Odor threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability : 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 Kow) : No data available
Viscosity, kinematic : No data available
Explosion limits : No data available
Lower explosive limit (LEL) : No data available
Upper explosive limit (UEL) : No data available

9.2. Other information

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

SECTION 11: Toxicological information

11.1. Acute toxicity

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Water (7732-18-5)	
LD50 oral rat	90000 mg/kg

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity – single exposure	:	Not classified
Specific target organ toxicity – repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Ecotoxicity

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

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.2. Persistence and degradability

Total Milk Allergen-HRP Conjugate	
Persistence and degradability	Not rapidly degradable

Proprietary Enzyme	
Persistence and degradability	Not rapidly degradable

Water (7732-18-5)	
Persistence and degradability	Not rapidly degradable

Caseins, hydrolyzates (65072-00-6)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Total Milk Allergen-HRP Conjugate	
Bioaccumulative potential	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.4. Mobility in soil

Total Milk Allergen-HRP Conjugate	
Mobility in soil	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

IMDG	IATA	UNRTDG
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Special precautions for user

UN RTDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Priority Chemical List (PCL) and Chemical Control Orders (CCO)		
Initial List of Single Substances and Compounds Covered under Chemical Control Order (CCO) and Priority Chemical List (PCL) DENR Administrative Order 2015-09	Not applicable	
Priority Chemical List DENR Administrative Order 2005-27	Not applicable	
Chemical Control Orders	Not applicable	
Chemical Control Order for Ozone Depleting Substances	Not applicable	

Others		
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Applicable	CRAON 17-502 (7732-18-5) CASEIN HYDROLYSATE (65072-00-6)
Controlled Chemical for Manufacture of Explosives or Explosives Ingredients Presidential Decree No.1866	Not applicable	
Comprehensive Dangerous Drugs Act of 2002	Not applicable	
Fertilizers and Pesticides Regulation (Decree No. 1144)	Not applicable	
Food Additives Regulation	Not applicable	
Management of Hazardous Waste (Republic Act No. 6969)	Not applicable	
Philippines Clean Air Act	Not applicable	
High Volume Chemicals List	Not applicable	

15.2. International regulations

No additional information available

SECTION 16: Other information

Version : 2.0
Issue date : 11/08/2025
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Safety Data Sheet (SDS), Philippines

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.

SECTION 1: Identification

1.1. Product identifier

Trade name : K-Blue® Advanced Plus TMB Substrate
Name : K-Blue Advanced Plus TMB Substrate
Product code 379210

1.2. Other means of identification

Part Number(s) : 379210|379171||379175|379176|379177|379257|379xxx|700006518|700006523

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Scientific research and development,Laboratory chemicals

1.4. Details of the supplier of the safety data sheet

Neogen Corporation
620 Lesher Place Lansing 48912 Michigan United States of America
T 800.234.5333
sds@neogen.com - https://www.neogen.com/

1.5. Emergency telephone 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: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

No additional information available

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS PH classification
Water	CAS-No.: 7732-18-5	> 90	Not classified
Dimethyl sulfoxide	CAS-No.: 67-68-5	≥ 5 – < 10	Flam. Liq. 4, H227
Buffer salts	-	≥ 0.1 – < 0.5	Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H335
Buffer salts	-	≥ 0.1 – < 0.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Name	Product identifier	%	GHS PH classification
Peroxide	-	< 0.1	Ox. Sol. 3, H272 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 2, H411
Preservative	-	< 0.1	Skin Sens. 1, H317
3,3',5,5'-Tetramethylbenzidine	CAS-No.: 54827-17-7	< 0.1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Preservative	-	< 0.1	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

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.

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.

Personal protection for first-aid responders. : First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : None under normal conditions.

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

5.3. Advice for firefighters

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 : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

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.

Packaging materials : Always store product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Exposure limit values of other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

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):

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Solution.
Color	:	Clear
Odor	:	Odorless
Odor threshold	:	No data available
pH	:	≥ 3.1 – ≤ 3.4
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	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 Kow)	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	No data available
Lower explosive limit (LEL)	:	No data available
Upper explosive limit (UEL)	:	No data available

9.2. Other information

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

SECTION 11: Toxicological information

11.1. Acute toxicity

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Water (7732-18-5)	
LD50 oral rat	90000 mg/kg

Dimethyl sulfoxide (67-68-5)	
LD50 oral rat	28300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	14500 mg/kg
LD50 dermal rat	40000 mg/kg body weight (Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal	40000 mg/kg
LC50 Inhalation - Rat	> 5.33 mg/l Source: ECHA
LC50 Inhalation - Rat (Dust/Mist)	5.33 mg/l/4h

Buffer salts	
LD50 oral rat	11700 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 7 day(s))
LD50 oral	5400 mg/kg body weight (Equivalent or similar to OECD 401, Mouse, Male / female, Experimental value, Oral, 10 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

Buffer salts	
LD50 oral rat	> 5000 mg/kg body weight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 5000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)
LD50 dermal rabbit	5900 mg/kg Source: Corporate Solution From Thomson Micromedex

Peroxide	
LD50 oral rat	> 2000 mg/kg Source: ECHA
LD50 oral	2500 mg/kg
LD50 dermal rabbit	700 mg/kg body weight (Rabbit, Experimental value, Skin)

Preservative	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)

Skin corrosion/irritation : Not classified.
pH: ≥ 3.1 – ≤ 3.4

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Buffer salts	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Buffer salts	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Peroxide	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

3,3',5,5'-Tetramethylbenzidine (54827-17-7)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Preservative	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : Not classified

Dimethyl sulfoxide (67-68-5)	
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	2.783 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Guideline: EPA OPPTS 870.3465 (90-Day Inhalation Toxicity)
NOAEL (oral,rat,90 days)	≥ 1000 mg/kg body weight Animal: rat, Guideline: other:

Buffer salts	
LOAEL (oral,rat,90 days)	8000 mg/kg body weight Animal: rat
NOAEL (oral,rat,90 days)	4000 mg/kg body weight Animal: rat

Buffer salts	
LOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral,rat,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Peroxide	
NOAEL (dermal,rat/rabbit,90 days)	216 mg/kg body weight Animal: rat
NOAEL (subchronic,oral,animal/male,90 days)	26 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (subchronic,oral,animal/female,90 days)	37 mg/kg body weight Animal: mouse, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Ecotoxicity

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.

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Dimethyl sulfoxide (67-68-5)	
LC50 - Fish [1]	> 25 g/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	25 g/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
ErC50 algae	17 g/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Partition coefficient n-octanol/water (Log Pow)	-1.4 (Experimental value, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.64 (log Koc, SRC PCKOCWIN v1.66, Calculated value)

Buffer salts	
LC50 - Fish [1]	440 – 760 mg/l (Equivalent or similar to OECD 203, 48 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Other aquatic organisms [1]	> 50 mg/l Test organisms (species): other aquatic crustacea:
Partition coefficient n-octanol/water (Log Pow)	-1.8 – -1.6 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Buffer salts	
LC50 - Fish [1]	955.892 mg/l Source: Ecological Structure Activity Relationships
EC50 - Crustacea [1]	> 980 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	397 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	163.053 mg/l Source: Ecological Structure Activity Relationships
ErC50 algae	397 mg/l (Equivalent or similar to OECD 201, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Partition coefficient n-octanol/water (Log Pow)	-2.31 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.34 – 1.87 (log Koc, QSAR)

Peroxide	
LC50 - Fish [1]	> 10000 mg/l (48 h, Leuciscus melanotus, Static system, Fresh water, Experimental value)
LC50 - Fish [2]	37.4 mg/l Test organisms (species): Ictalurus punctatus
EC50 - Crustacea [1]	> 10000 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 - Other aquatic organisms [1]	5.6 mg/l Test organisms (species): other:
EC50 - Other aquatic organisms [2]	2 mg/l Test organisms (species): other:
Partition coefficient n-octanol/water (Log Pow)	0.09 (QSAR, 25 °C)

Preservative	
Partition coefficient n-octanol/water (Log Pow)	-2.54 (Estimated value)

12.2. Persistence and degradability

K-Blue® Advanced Plus TMB Substrate	
Persistence and degradability	Not rapidly degradable

Water (7732-18-5)	
Persistence and degradability	Not rapidly degradable

Dimethyl sulfoxide (67-68-5)	
Persistence and degradability	Not readily biodegradable in water.

Buffer salts	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.42 g O_2/g substance
Chemical oxygen demand (COD)	0.728 g O_2/g substance
ThOD	0.686 g O_2/g substance

Buffer salts	
Persistence and degradability	Readily biodegradable in water.

Peroxide	
Persistence and degradability	Readily biodegradable in water.

Preservative	
Persistence and degradability	Not rapidly degradable

3,3',5,5'-Tetramethylbenzidine (54827-17-7)	
Persistence and degradability	Biodegradability in water: no data available.

Preservative	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

K-Blue® Advanced Plus TMB Substrate	
Bioaccumulative potential	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Dimethyl sulfoxide (67-68-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.4 (Experimental value, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.64 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

Buffer salts	
Partition coefficient n-octanol/water (Log Pow)	-1.8 – -1.6 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

Buffer salts	
Partition coefficient n-octanol/water (Log Pow)	-2.31 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.34 – 1.87 (log Koc, QSAR)
Bioaccumulative potential	Not bioaccumulative.

Peroxide	
Partition coefficient n-octanol/water (Log Pow)	0.09 (QSAR, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

3,3',5,5'-Tetramethylbenzidine (54827-17-7)	
Bioaccumulative potential	No bioaccumulation data available.

Preservative	
Partition coefficient n-octanol/water (Log Pow)	-2.54 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

K-Blue® Advanced Plus TMB Substrate	
Mobility in soil	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Dimethyl sulfoxide (67-68-5)	
Surface tension	43.5 mN/m (20 °C, 100 vol %)
Partition coefficient n-octanol/water (Log Pow)	-1.4 (Experimental value, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.64 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Ecology - soil	Highly mobile in soil.

Buffer salts	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	-1.8 – -1.6 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

Buffer salts	
Partition coefficient n-octanol/water (Log Pow)	-2.31 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.34 – 1.87 (log Koc, QSAR)
Ecology - soil	Highly mobile in soil.

Peroxide	
Partition coefficient n-octanol/water (Log Pow)	0.09 (QSAR, 25 °C)

Preservative	
Partition coefficient n-octanol/water (Log Pow)	-2.54 (Estimated value)

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Ecological waste information	:	The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.
Sewage disposal recommendations	:	Disposal must be done according to official regulations.
Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	:	Disposal must be done according to official regulations.
Additional information	:	Do not re-use empty containers.

SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

IMDG	IATA	UNRTDG
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Special precautions for user

UN RTDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Priority Chemical List (PCL) and Chemical Control Orders (CCO)		
Initial List of Single Substances and Compounds Covered under Chemical Control Order (CCO) and Priority Chemical List (PCL) DENR Administrative Order 2015-09	Not applicable	
Priority Chemical List DENR Administrative Order 2005-27	Not applicable	
Chemical Control Orders	Not applicable	

Priority Chemical List (PCL) and Chemical Control Orders (CCO)		
Chemical Control Order for Ozone Depleting Substances	Not applicable	

Others		
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Applicable	CRAON 17-502 (7732-18-5) DIMETHYLSULFOXIDE (67-68-5) Buffer salts Peroxide Preservative
Controlled Chemical for Manufacture of Explosives or Explosives Ingredients Presidential Decree No.1866	Not applicable	
Comprehensive Dangerous Drugs Act of 2002	Not applicable	
Fertilizers and Pesticides Regulation (Decree No. 1144)	Not applicable	
Food Additives Regulation	Not applicable	
Management of Hazardous Waste (Republic Act No. 6969)	Not applicable	
Philippines Clean Air Act	Not applicable	
High Volume Chemicals List	Applicable	Tetramethylbezidine (54827-17-7)

15.2. International regulations

No additional information available

SECTION 16: Other information

Version : 5.0
Issue date : 01/07/2025
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Supersedes : 01/06/2026

Safety Data Sheet (SDS), Philippines

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.

SECTION 1: Identification

1.1. Product identifier

Trade name : Red Stop Solution
Name : Red Stop Solution
Product code 301210

1.2. Other means of identification

Part Number(s) : 301210|301471|301473|301474|301475|301476|700006516

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals,Scientific research and development

1.4. Details of the supplier of the safety data sheet

Manufacturer
Neogen Corporation
620 Lesher Place Lansing 48912 Michigan United States of America
T 800.234.5333
sds@neogen.com - https://www.neogen.com/

1.5. Emergency telephone 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: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

No additional information available

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS PH classification
Water	CAS-No.: 7732-18-5	> 98	Not classified
Buffer salts	-	≥0.5 -< 2	Not classified
Buffer salts	-	≥ 0.1 – < 0.5	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 1, H372

Name	Product identifier	%	GHS PH classification
Preservative	-	< 0.1	Not classified
Preservative	-	< 0.1	Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373
Buffer salts	-	< 0.1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT RE 2, H373

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
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.
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.
Personal protection for first-aid responders. : First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Reactivity : The product is non-reactive under normal conditions of use, storage and transport.
General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

5.3. Advice for firefighters

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 : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
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.
Packaging materials : Always store product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Buffer salts	
Philippines - Occupational Exposure Limits	
OEL TWA	1 mg/m³
Regulatory reference	Occupational Safety And Health Standards Philippines

Exposure limit values of other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

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):

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Aqueous solution.
Color	:	Red
Odor	:	Odorless
Odor threshold	:	No data available
pH	:	8.7
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	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 Kow)	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	No data available
Lower explosive limit (LEL)	:	No data available
Upper explosive limit (UEL)	:	No data available

9.2. Other information

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

SECTION 11: Toxicological information

11.1. Acute toxicity

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Water (7732-18-5)	
LD50 oral rat	90000 mg/kg

Buffer salts	
LD50 oral rat	> 3980 mg/kg body weight (Rat, Experimental value, 20 % aqueous solution, Oral)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	> 42 mg/l air (1 h, Rat, Male, Experimental value, 20 % aqueous solution, Inhalation (aerosol))
LC50 Inhalation - Rat (Dust/Mist)	> 10.5 mg/l Source: Corporate Solution From Thomson Micromedex

Buffer salts	
LD50 oral rat	223 mg/kg body weight (EPA OPPTS 870.1100: Acute Oral Toxicity, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 oral	69 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight (EPA OPPTS 870.1200: Acute Dermal Toxicity, Rat, Experimental value, Dermal)
LC50 Inhalation - Rat	1 mg/l/4h

Buffer salts	
LD50 oral rat	1530 mg/kg
LD50 oral	2000 mg/kg
LD50 dermal rabbit	2000 mg/kg
LD50 dermal	1071 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	0.9615 mg/l/4h

Preservative	
LD50 oral rat	2800 mg/kg body weight (BASF test, Rat, Male / female, Experimental value, Anhydrous form, Oral)

Skin corrosion/irritation : Not classified
pH: 8.7
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Buffer salts	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified
Specific target organ toxicity – repeated exposure : Not classified

Buffer salts	
LOAEL (oral,rat,90 days)	≈ 4 mg/kg body weight Animal: rat, Guideline: other:
NOAEL (oral,rat,90 days)	≈ 25 mg/kg body weight Animal: rat, Guideline: other:
Specific target organ toxicity – repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Buffer salts	
NOAEL (oral,rat,28 days)	250 mg/kg bw/day
NOAEL (oral,rat,90 days)	338 mg/kg bw/day
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Preservative	
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Ecotoxicity

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

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Buffer salts	
LC50 - Fish [1]	5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
LOEC (chronic)	441 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'
NOEC (chronic)	314 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'

Buffer salts	
LC50 - Fish [1]	107.5 ppm (US EPA, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Fluorine ion)
LC50 - Fish [2]	165 mg/l Test organisms (species): other:
EC50 - Crustacea [1]	97 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, Fluorine ion)
EC50 72h - Algae [1]	850 mg/l Source: NCIS; Toxic Substances Information Report
EC50 96h - Algae [1]	43 mg/l (Scenedesmus sp., Static system, Experimental value, Fluorine ion)
ErC50 algae	> 100 mg/l
NOEC (chronic)	14.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	4 mg/l
NOEC chronic crustacea	8.2 mg/l
BCF - Fish [1]	53 – 58 (Pisces, Fresh water, Literature study, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.77 Source: EPISUITE

Buffer salts	
LC50 - Fish [1]	75.1 mg/l
EC50 - Crustacea [1]	> 376 mg/l
EC50 72h - Algae [1]	77.9 mg/l
NOEC chronic fish	40 mg/l
NOEC chronic crustacea	1.02 mg/l

Preservative	
LC50 - Fish [1]	705 mg/l (US EPA, 96 h, Lepomis macrochirus, Static system, Fresh water, Read-across, Anhydrous form)
EC50 - Crustacea [1]	140 mg/l (DIN 38412-11, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Anhydrous form)
ErC50 algae	> 100 mg/l (EU Method C.3, 72 h, Scenedesmus subspicatus, Static system, Fresh water, Read-across, Anhydrous form)
BCF - Fish [1]	1.8 (Other, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Read-across, Anhydrous form)
Partition coefficient n-octanol/water (Log Pow)	-4.3 (Experimental value, Equivalent or similar to OECD 107, 25 °C)

12.2. Persistence and degradability

Red Stop Solution	
Persistence and degradability	Not rapidly degradable

Water (7732-18-5)	
Persistence and degradability	Not rapidly degradable

Buffer salts	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Buffer salts	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Preservative	
Persistence and degradability	Not rapidly degradable

Buffer salts	
Persistence and degradability	Biodegradability: not applicable.

Preservative	
Persistence and degradability	Not readily biodegradable in the soil, Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.01 g O_2/g substance

12.3. Bioaccumulative potential

Red Stop Solution	
Bioaccumulative potential	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Buffer salts	
Bioaccumulative potential	Not bioaccumulative.

Buffer salts	
BCF - Fish [1]	53 – 58 (Pisces, Fresh water, Literature study, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.77 Source: EPISUITE
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Buffer salts	
Bioaccumulative potential	No test data of component(s) available.

Preservative	
BCF - Fish [1]	1.8 (Other, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Read-across, Anhydrous form)
Partition coefficient n-octanol/water (Log Pow)	-4.3 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Red Stop Solution	
Mobility in soil	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Buffer salts	
Surface tension	73.03 mN/m (23 °C, 14.5 g/l)
Ecology - soil	No (test)data on mobility of the substance available.

Buffer salts	
Partition coefficient n-octanol/water (Log Pow)	-0.77 Source: EPISUITE
Ecology - soil	Adsorbs into the soil. Toxic to flora.

Buffer salts	
Ecology - soil	Highly mobile in soil.

Preservative	
Mobility in soil	312.7 Source: EPISUITE
Partition coefficient n-octanol/water (Log Pow)	-4.3 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

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

SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

IMDG	IATA	UNRTDG
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Special precautions for user

UN RTDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Priority Chemical List (PCL) and Chemical Control Orders (CCO)		
Initial List of Single Substances and Compounds Covered under Chemical Control Order (CCO) and Priority Chemical List (PCL) DENR Administrative Order 2015-09	Not applicable	
Priority Chemical List DENR Administrative Order 2005-27	Not applicable	
Chemical Control Orders	Not applicable	
Chemical Control Order for Ozone Depleting Substances	Not applicable	

Others		
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Applicable	CRAON 17-502 (7732-18-5) Buffer salts Preservative
Controlled Chemical for Manufacture of Explosives or Explosives Ingredients Presidential Decree No.1866	Not applicable	
Comprehensive Dangerous Drugs Act of 2002	Not applicable	
Fertilizers and Pesticides Regulation (Decree No. 1144)	Not applicable	
Food Additives Regulation	Not applicable	
Management of Hazardous Waste (Republic Act No. 6969)	Applicable	Buffer salts
Philippines Clean Air Act	Not applicable	
High Volume Chemicals List	Applicable	Buffer salts

15.2. International regulations

No additional information available

SECTION 16: Other information

Version : 5.0
Issue date : 07/07/2025
Revision date : 18/06/2026
Supersedes : 01/06/2026

Safety Data Sheet (SDS), Philippines

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.

SECTION 1: Identification

1.1. Product identifier

Trade name : Wash Buffer Concentrate, 25X

Name : Wash Buffer Concentrate, 25X

Product code 24269

1.2. Other means of identification

Part Number(s) : 8428|24218|24269|400000123|400000128|700002567

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Scientific research and development,Laboratory chemicals

Restrictions on use : Do not use kit components from one kit with any other kit.

1.4. Details of the supplier of the safety data sheet

Manufacturer

Neogen Corporation

620 Lesher Place Lansing 48912 Michigan United States of America

T 800.234.5333

sds@neogen.com - https://www.neogen.com/

1.5. Emergency telephone 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: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

No additional information available

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS PH classification
Water	CAS-No.: 7732-18-5	≥ 50 – < 75	Not classified
Sodium chloride	CAS-No.: 7647-14-5	≥ 15 – < 25	Not classified
Disodium phosphate	CAS-No.: 7558-79-4	≥ 1 – < 5	Not classified
Potassium chloride	CAS-No.: 7447-40-7	≥ 0.5 – < 1	Not classified
Sodium phosphate monobasic monohydrate	CAS-No.: 10049-21-5	≥ 0.1 – < 0.5	Eye Irrit. 2A, H319 STOT SE 3, H335

Name	Product identifier	%	GHS PH classification
Thimerosal	CAS-No.: 54-64-8	< 0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
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.
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.
Personal protection for first-aid responders. : First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Reactivity : The product is non-reactive under normal conditions of use, storage and transport.
General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

5.3. Advice for firefighters

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 : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

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.

Packaging materials : Always store product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Exposure limit values of other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

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):

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Solution.
Color	:	Clear,Colorless
Odor	:	Odorless
Odor threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	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 Kow)	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	No data available
Lower explosive limit (LEL)	:	No data available
Upper explosive limit (UEL)	:	No data available

9.2. Other information

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

SECTION 11: Toxicological information

11.1. Acute toxicity

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Water (7732-18-5)	
LD50 oral rat	90000 mg/kg

Sodium chloride (7647-14-5)	
LD50 oral rat	> 3980 mg/kg body weight (Rat, Experimental value, 20 % aqueous solution, Oral)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	> 42 mg/l air (1 h, Rat, Male, Experimental value, 20 % aqueous solution, Inhalation (aerosol))
LC50 Inhalation - Rat (Dust/Mist)	> 10.5 mg/l Source: Corporate Solution From Thomson Micromedex

Disodium phosphate (7558-79-4)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 0.83 mg/l air Animal: rat, Guideline: EPA OPP 81-3 (Acute inhalation toxicity), Guideline: other:, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: other:

Potassium chloride (7447-40-7)	
LD50 oral rat	3020 mg/kg body weight (Rat, Female, Experimental value, Oral)
LC50 Inhalation - Rat (Dust/Mist)	> 2.4 mg/l

Sodium phosphate monobasic monohydrate (10049-21-5)	
LD50 oral rat	8290 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)

Thimerosal (54-64-8)	
LD50 oral	75 mg/kg
LC50 Inhalation - Rat	0.201 mg/l Source: GESTIS

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Potassium chloride (7447-40-7)	
NOAEL (chronic,oral,animal/male,2 years)	≈ 1820 mg/kg body weight Animal: rat, Animal sex: male

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Sodium phosphate monobasic monohydrate (10049-21-5)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : Not classified

Disodium phosphate (7558-79-4)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Potassium chloride (7447-40-7)	
NOAEL (oral,rat,90 days)	≈ 1820 mg/kg body weight Animal: rat, Animal sex: male

Thimerosal (54-64-8)	
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Ecotoxicity

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.

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Sodium chloride (7647-14-5)	
LC50 - Fish [1]	5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
LOEC (chronic)	441 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'
NOEC (chronic)	314 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'

Disodium phosphate (7558-79-4)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	564000000 mg/l Source: Ecological Structure Activity Relationships
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards

Potassium chloride (7447-40-7)	
LC50 - Fish [1]	880 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	440 – 880 mg/l (EPA 600/4-90/027, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 - Other aquatic organisms [1]	440 – 880 mg/l Test organisms (species): other:
EC50 - Other aquatic organisms [2]	580 – 670 mg/l Test organisms (species): other:
EC50 72h - Algae [1]	> 100 mg/l Source: ECHA

Potassium chloride (7447-40-7)	
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
Partition coefficient n-octanol/water (Log Pow)	-0.46 Source: OECD Screening Information Data Set

Sodium phosphate monobasic monohydrate (10049-21-5)	
LC50 - Fish [1]	> 2400 mg/l (48 h, Leuciscus idus, Anhydrous form)

Thimerosal (54-64-8)	
LC50 - Fish [1]	0.16 mg/l (96 h, Cyprinus carpio, Literature study, Mercury ion)
Partition coefficient n-octanol/water (Log Pow)	-1.88 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.235 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

12.2. Persistence and degradability

Wash Buffer Concentrate, 25X	
Persistence and degradability	Not rapidly degradable

Water (7732-18-5)	
Persistence and degradability	Not rapidly degradable

Sodium chloride (7647-14-5)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Disodium phosphate (7558-79-4)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Potassium chloride (7447-40-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Sodium phosphate monobasic monohydrate (10049-21-5)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Thimerosal (54-64-8)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

Wash Buffer Concentrate, 25X	
Bioaccumulative potential	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Sodium chloride (7647-14-5)	
Bioaccumulative potential	Not bioaccumulative.

Disodium phosphate (7558-79-4)	
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards
Bioaccumulative potential	Not bioaccumulative.

Potassium chloride (7447-40-7)	
Partition coefficient n-octanol/water (Log Pow)	-0.46 Source: OECD Screening Information Data Set
Bioaccumulative potential	Not bioaccumulative.

Sodium phosphate monobasic monohydrate (10049-21-5)	
Bioaccumulative potential	No bioaccumulation data available.

Thimerosal (54-64-8)	
Partition coefficient n-octanol/water (Log Pow)	-1.88 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.235 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Wash Buffer Concentrate, 25X	
Mobility in soil	No additional information available

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Sodium chloride (7647-14-5)	
Surface tension	73.03 mN/m (23 °C, 14.5 g/l)
Ecology - soil	No (test)data on mobility of the substance available.

Disodium phosphate (7558-79-4)	
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards
Ecology - soil	No (test)data on mobility of the substance available.

Potassium chloride (7447-40-7)	
Partition coefficient n-octanol/water (Log Pow)	-0.46 Source: OECD Screening Information Data Set
Ecology - soil	Low potential for adsorption in soil.

Thimerosal (54-64-8)	
Partition coefficient n-octanol/water (Log Pow)	-1.88 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.235 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Ecological waste information	:	The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.
Sewage disposal recommendations	:	Disposal must be done according to official regulations.
Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	:	Disposal must be done according to official regulations.
Additional information	:	Do not re-use empty containers.

SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

IMDG	IATA	UNRTDG
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Special precautions for user

UN RTDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Priority Chemical List (PCL) and Chemical Control Orders (CCO)		
Initial List of Single Substances and Compounds Covered under Chemical Control Order (CCO) and Priority Chemical List (PCL) DENR Administrative Order 2015-09	Not applicable	
Priority Chemical List DENR Administrative Order 2005-27	Not applicable	
Chemical Control Orders	Not applicable	

Priority Chemical List (PCL) and Chemical Control Orders (CCO)		
Chemical Control Order for Ozone Depleting Substances	Not applicable	

Others		
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Applicable	CRAON 17-502 (7732-18-5) SODIUM CHLORIDE (7647-14-5) Di-Sodium Hydrogen Phosphate (7558-79-4) Potassium Chloride (7447-40-7) Phosphoric acid, monosodium salt, monohydrate (10049-21-5) Mercurate(1-), ethyl[2-(mercapto-.kappa.S)benzoato(2-)-.kappa.O]-, sodium (54-64-8)
Controlled Chemical for Manufacture of Explosives or Explosives Ingredients Presidential Decree No.1866	Not applicable	
Comprehensive Dangerous Drugs Act of 2002	Not applicable	
Fertilizers and Pesticides Regulation (Decree No. 1144)	Not applicable	
Food Additives Regulation	Enzymes permitted for use in food	Sodium chloride (7647-14-5) Disodium phosphate (7558-79-4)
	Additives approved only for use as food processing	Potassium chloride (7447-40-7)
Management of Hazardous Waste (Republic Act No. 6969)	Not applicable	
Philippines Clean Air Act	Not applicable	
High Volume Chemicals List	Applicable	Sodium chloride (7647-14-5) Disodium phosphate (7558-79-4) Potassium chloride(Muriate of potash) (7447-40-7)

15.2. International regulations

No additional information available

SECTION 16: Other information

Version	:	3.0
Issue date	:	11/07/2025
Revision date	:	18/06/2026
Supersedes	:	24/09/2025

Safety Data Sheet (SDS), Philippines

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.

SECTION 1: Identification

1.1. Product identifier

Trade name : Phosphate Buffered Saline, Foil Pouch
Name : Phosphate Buffered Saline, Foil Pouch
Product code 0114

1.2. Other means of identification

Part Number(s) : 0114|100000012

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals,Scientific research and development

1.4. Details of the supplier of the safety data sheet

Manufacturer
Neogen Corporation
620 Lesher Place Lansing 48912 Michigan United States of America
T 800.234.5333
sds@neogen.com - https://www.neogen.com/

1.5. Emergency telephone 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: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

No additional information available

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS PH classification
Sodium chloride	CAS-No.: 7647-14-5	≥ 75	Not classified
Disodium phosphate	CAS-No.: 7558-79-4	≥ 10 – < 15	Not classified
Potassium chloride	CAS-No.: 7447-40-7	≥ 1 – < 5	Not classified
Sodium phosphate monobasic	CAS-No.: 7558-80-7	≥ 1 – < 5	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

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.

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.

Personal protection for first-aid responders. : First-aiders should consider self-protection and use the recommended personal protective equipment (see section 8).

4.2. Most important symptoms and effects, both 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 : 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 any immediate medical attention and special treatment needed

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

5.3. Advice for firefighters

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.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
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.
Packaging materials : Always store product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Exposure limit values of other components

No additional information available

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

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):

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Powder.
Color	:	Off-white
Odor	:	Mild odor
Odor threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butyl acetate=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	:	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 Kow)	:	No data available
Viscosity, kinematic	:	Not applicable
Explosion limits	:	Not applicable
Lower explosive limit (LEL)	:	No data available
Upper explosive limit (UEL)	:	No data available

9.2. Other information

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

SECTION 11: Toxicological information

11.1. Acute toxicity

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Sodium chloride (7647-14-5)	
LD50 oral rat	> 3980 mg/kg body weight (Rat, Experimental value, 20 % aqueous solution, Oral)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	> 42 mg/l air (1 h, Rat, Male, Experimental value, 20 % aqueous solution, Inhalation (aerosol))
LC50 Inhalation - Rat (Dust/Mist)	> 10.5 mg/l Source: Corporate Solution From Thomson Micromedex

Disodium phosphate (7558-79-4)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 0.83 mg/l air Animal: rat, Guideline: EPA OPP 81-3 (Acute inhalation toxicity), Guideline: other:, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: other:

Potassium chloride (7447-40-7)	
LD50 oral rat	3020 mg/kg body weight (Rat, Female, Experimental value, Oral)
LC50 Inhalation - Rat (Dust/Mist)	> 2.4 mg/l

Sodium phosphate monobasic (7558-80-7)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	> 7940 mg/kg Source: IUCLID
LC50 Inhalation - Rat	> 0.83 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Potassium chloride (7447-40-7)	
NOAEL (chronic,oral,animal/male,2 years)	≈ 1820 mg/kg body weight Animal: rat, Animal sex: male

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Disodium phosphate (7558-79-4)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Potassium chloride (7447-40-7)	
NOAEL (oral,rat,90 days)	≈ 1820 mg/kg body weight Animal: rat, Animal sex: male

Sodium phosphate monobasic (7558-80-7)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified

Phosphate Buffered Saline, Foil Pouch	
Viscosity, kinematic	Not applicable

SECTION 12: Ecological information

12.1. Ecotoxicity

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

Sodium chloride (7647-14-5)	
LC50 - Fish [1]	5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
LOEC (chronic)	441 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'
NOEC (chronic)	314 mg/l Test organisms (species): Daphnia pulex Duration: '21 d'

Disodium phosphate (7558-79-4)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	564000000 mg/l Source: Ecological Structure Activity Relationships
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards

Potassium chloride (7447-40-7)	
LC50 - Fish [1]	880 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	440 – 880 mg/l (EPA 600/4-90/027, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 - Other aquatic organisms [1]	440 – 880 mg/l Test organisms (species): other:
EC50 - Other aquatic organisms [2]	580 – 670 mg/l Test organisms (species): other:
EC50 72h - Algae [1]	> 100 mg/l Source: ECHA
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
Partition coefficient n-octanol/water (Log Pow)	-0.46 Source: OECD Screening Information Data Set

Sodium phosphate monobasic (7558-80-7)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Sodium phosphate monobasic (7558-80-7)	
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	-3.96 (Estimated value)

12.2. Persistence and degradability

Phosphate Buffered Saline, Foil Pouch	
Persistence and degradability	Not rapidly degradable

Sodium chloride (7647-14-5)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Disodium phosphate (7558-79-4)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Potassium chloride (7447-40-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Sodium phosphate monobasic (7558-80-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Phosphate Buffered Saline, Foil Pouch	
Bioaccumulative potential	No additional information available

Sodium chloride (7647-14-5)	
Bioaccumulative potential	Not bioaccumulative.

Disodium phosphate (7558-79-4)	
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards
Bioaccumulative potential	Not bioaccumulative.

Potassium chloride (7447-40-7)	
Partition coefficient n-octanol/water (Log Pow)	-0.46 Source: OECD Screening Information Data Set
Bioaccumulative potential	Not bioaccumulative.

Sodium phosphate monobasic (7558-80-7)	
Partition coefficient n-octanol/water (Log Pow)	-3.96 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Phosphate Buffered Saline, Foil Pouch	
Mobility in soil	No additional information available

Sodium chloride (7647-14-5)	
Surface tension	73.03 mN/m (23 °C, 14.5 g/l)
Ecology - soil	No (test)data on mobility of the substance available.

Disodium phosphate (7558-79-4)	
Partition coefficient n-octanol/water (Log Pow)	-5.8 Source: International Chemical Safety Cards
Ecology - soil	No (test)data on mobility of the substance available.

Potassium chloride (7447-40-7)	
Partition coefficient n-octanol/water (Log Pow)	-0.46 Source: OECD Screening Information Data Set
Ecology - soil	Low potential for adsorption in soil.

Sodium phosphate monobasic (7558-80-7)	
Mobility in soil	0.06887 Source: EPISUITE
Partition coefficient n-octanol/water (Log Pow)	-3.96 (Estimated value)
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
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 IMDG / IATA / UN RTDG

IMDG	IATA	UNRTDG
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated

IMDG	IATA	UNRTDG
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Special precautions for user

UN RTDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Priority Chemical List (PCL) and Chemical Control Orders (CCO)		
Initial List of Single Substances and Compounds Covered under Chemical Control Order (CCO) and Priority Chemical List (PCL) DENR Administrative Order 2015-09	Not applicable	
Priority Chemical List DENR Administrative Order 2005-27	Not applicable	
Chemical Control Orders	Not applicable	
Chemical Control Order for Ozone Depleting Substances	Not applicable	

Others		
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Applicable	SODIUM CHLORIDE (7647-14-5) Di-Sodium Hydrogen Phosphate (7558-79-4) Potassium Chloride (7447-40-7) MONOSODIUM DIHYDROGEN PHOSPHATE (7558-80-7)
Controlled Chemical for Manufacture of Explosives or Explosives Ingredients Presidential Decree No.1866	Not applicable	
Comprehensive Dangerous Drugs Act of 2002	Not applicable	
Fertilizers and Pesticides Regulation (Decree No. 1144)	Not applicable	
Food Additives Regulation	Enzymes permitted for use in food	Sodium chloride (7647-14-5) Disodium phosphate (7558-79-4) Sodium phosphate, monobasic (7558-80-7)
	Additives approved only for use as food processing	Potassium chloride (7447-40-7)

Others		
Management of Hazardous Waste (Republic Act No. 6969)	Not applicable	
Philippines Clean Air Act	Not applicable	
High Volume Chemicals List	Applicable	Sodium chloride (7647-14-5) Disodium phosphate (7558-79-4) Potassium chloride(Muriate of potash) (7447-40-7)

15.2. International regulations

No additional information available

SECTION 16: Other information

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Safety Data Sheet (SDS), Philippines

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.