Protein Rapid Kits- Extraction Buffer

Safety Data Sheet

according to the DENR EMB MC 2015-011 and DAO 2015-09 Guidance Manual
Issue date: 16/06/2025 Revision date: 22/06/2026 Supersedes: 22/06/2026 Version: 4.0

SECTION 1: Identification

1.1. Product identifier

Trade name : Protein Rapid Kits- Extraction Buffer
Name : Rapid Allergen Extraction Buffer (legacy 3M)
Product code L25XXX

1.2. Other means of identification

Part Number(s) : L25ALM|L25CHW|L25PST|L25PNT|L25PEC|L25HZL|L25FSH|L25COC|L25SOY|L25GLU|L25WAL|L25EGG|L25MLK|700002292|700002303|700002288|700002294|700002317|700002287|700002302|700002301|700002296|700002291|700002286|700002290|700002293

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. Supplier's details

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

Carcinogenicity, Category 1A H350

2.2. Label elements

Hazard pictograms (GHS PH) :

Signal word (GHS PH) : Danger
Contains : Ethanol
Hazard statements (GHS PH) : H350 - May cause cancer
Precautionary statements (GHS PH) : P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....
P318 - IF exposed or concerned, get medical advice.
P405 - Store locked up.
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
Water	CAS-No.: 7732-18-5	50 – 98.262	Not classified
Ethanol	CAS-No.: 64-17-5	≤ 15	Flam. Liq. 1, H224 Carc. 1A, H350
Excipient	-	≤ 15	Not classified
Stabilizer	-	≤ 15	Not classified
Sodium chloride	CAS-No.: 7647-14-5	≤ 2	Not classified
Blocking agent	-	≤ 2	Not classified
Tris hydrochloride	CAS-No.: 1185-53-1	≤ 0.8	Not classified
Citric acid monohydrate	CAS-No.: 77-92-9	≤ 0.6	Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H335
Sodium carbonate	CAS-No.: 497-19-8	≤ 0.6	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1, H314 Eye Dam. 1, H318
Sodium bicarbonate	CAS-No.: 144-55-8	≤ 0.5	Not classified
5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of	CAS-No.: 55965-84-9	≤ 0	Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Inhalation:gas), H331 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 STOT RE 1, H372 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=10)

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

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 or a doctor if you feel unwell.

Self protection of the first-aider : First-aiders should pay attention to their own 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 : 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: Fire-fighting 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. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : 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 : Only qualified personnel equipped with suitable protective equipment may intervene.

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. Notify authorities if product enters sewers or public waters.

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 without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly.

Hygiene measures : Separate working clothes from town clothes. Launder separately. 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 : Store locked up.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethanol (64-17-5)	
Philippines - Occupational Exposure Limits	
Local name	Ethyl Alcohol (Ethanol)
OEL TWA	1900 mg/m³
	1000 ppm
Regulatory reference	Occupational Safety And Health Standards Philippines

Exposure limit values for the 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 inadequate ventilation] wear respiratory protection.

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.
Colour	:	Colourless
Odour	:	Alcoholic
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	> 93 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	Not flammable
Vapour pressure	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	1.04
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Viscosity, kinematic	:	No data available
Explosive 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

Ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg (Rat, male and female) (OECD Test Guideline 401)
LD50 dermal rabbit	> 2000 mg/kg rabbit, OECD Test Guideline 402
LC50 Inhalation - Rat	51 mg/l (Rat; 4 h; vapour) (OECD Test Guideline 403)

Excipient	
LD50 oral rat	14300 – 15000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)

Stabilizer	
LD50 oral rat	27200 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Female, Experimental value, Oral, 10 day(s))
LD50 dermal	56750 mg/kg (4 day(s), Guinea pig, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5.85 mg/l (Equivalent or similar to OECD 412, 4 h, Rat, Male / female, Experimental value, Inhalation (mist), 14 day(s))
LC50 Inhalation - Rat (Vapours)	> 2.75 mg/l Source: ECHA

Sodium chloride (7647-14-5)	
LD50 oral rat	> 3980 mg/kg bodyweight (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

Tris hydrochloride (1185-53-1)	
LD50 oral rat	> 5000 mg/kg Source: ECHA
LD50 dermal rat	> 5000 mg/kg Source: ECHA

Citric acid monohydrate (77-92-9)	
LD50 oral rat	11700 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 7 day(s))
LD50 oral	5400 mg/kg bodyweight (Equivalent or similar to OECD 401, Mouse, Male / female, Experimental value, Oral, 10 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

Sodium carbonate (497-19-8)	
LD50 oral rat	2800 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	2800 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (16 CFR 1500.40, 24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LD50 dermal	2500 mg/kg

Sodium carbonate (497-19-8)	
LC50 Inhalation - Rat (Dust/Mist)	1.2 mg/l/4h

Sodium bicarbonate (144-55-8)	
LD50 oral rat	> 4000 mg/kg (FIFRA (40 CFR), Rat, Male / female, Experimental value, Oral)
LD50 oral	7334 mg/kg
LD50 dermal	2500 mg/kg
LC50 Inhalation - Rat	> 4.74 mg/l (EPA OTS 798.1150: Acute inhalation toxicity, 4.5 h, Rat, Male / female, Experimental value, Inhalation, 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	5.33 mg/l/4h

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
LD50 oral rat	66 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Calculated by reference to active substance, Oral, 14 day(s))
LD50 dermal rat	> 141 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Calculated by reference to active substance, Dermal, 14 day(s))
LD50 dermal rabbit	87.12 mg/kg
LC50 Inhalation - Rat	0.17 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Calculated by reference to active substance, Inhalation (dust), 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	0.33 mg/l Source: US EPA
LC50 Inhalation - Rat (Vapours)	0.171 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer.

Ethanol (64-17-5)	
NOAEL (chronic, oral, animal/male, 2 years)	> 4250 mg/kg bodyweight (Mouse, male)(Target Organs: Liver)(Oral; 105 weeks; Frequency of treatment: 5 days/week)(OPPTS 870.4200)
NOAEL (chronic, oral, animal/female, 2 years)	> 4000 mg/kg bodyweight (Mouse, female)(Target Organs: Liver)(Oral; 105 weeks; Frequency of treatment: 5 days/week)
IARC group	1 - Carcinogenic to humans

Reproductive toxicity : Not classified

Ethanol (64-17-5)	
NOAEL (animal/male, F1)	13.8 (Mouse, male and female)(OECD Test Guideline 416)Reduction in sperm motility.
NOAEL (animal/female, F1)	13.8 (Mouse, male and female)(OECD Test Guideline 416)Reduction in sperm motility.

STOT - single exposure : Not classified

Citric acid monohydrate (77-92-9)	
STOT - single exposure	May cause respiratory irritation.

STOT - repeated exposure : Not classified

Ethanol (64-17-5)	
LOAEL (oral, rat, 90 days)	3160 mg/kg bodyweight/day
NOAEL (oral, rat, 28 days)	1730 mg/kg bodyweight/day
NOAEL (oral, rat, 90 days)	3160 mg/kg bodyweight/day

Citric acid monohydrate (77-92-9)	
LOAEL (oral, rat, 90 days)	8000 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	4000 mg/kg bodyweight Animal: rat

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

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
LOAEL (dermal, rat/rabbit, 90 days)	0.1 mg/kg bw/day
NOAEL (oral, rat, 28 days)	0.4 mg/kg bw/day
NOAEC (inhalation, rat, 90 days)	0.34 mg/m³
STOT - repeated exposure	Causes 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 nor 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

Excipient	
LC50 - Fish [1]	> 6810 mg/l (96 h, Leuciscus idus, Experimental value, Lethal)
EC50 - Crustacea [1]	> 10000 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	24541.9 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	42184 mg/l Source: Ecological Structure Activity Relationships
Partition coefficient n-octanol/water (Log Pow)	< -1.73 (Experimental value, EU Method A.8: Partition Coefficient, 22 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	-1.43 – -1.19 (log Koc, Calculated value)

Stabilizer	
LC50 - Fish [1]	54000 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 10000 mg/l (24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
Partition coefficient n-octanol/water (Log Pow)	-1.8 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Sodium chloride (7647-14-5)	
LC50 - Fish [1]	5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)

Sodium chloride (7647-14-5)	
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'

Tris hydrochloride (1185-53-1)	
LC50 - Fish [1]	100 mg/l Source: ECHA
EC50 - Crustacea [1]	> 117 mg/l Source: ECHA
EC50 72h - Algae [1]	397 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
Partition coefficient n-octanol/water (Log Pow)	-3.6 Source: ECHA

Citric acid monohydrate (77-92-9)	
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)

Sodium carbonate (497-19-8)	
LC50 - Fish [1]	300 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	200 – 227 mg/l (48 h, Ceriodaphnia sp., Semi-static system, Fresh water, Experimental value, Locomotor effect)
EC50 - Crustacea [2]	200 – 227 mg/l Test organisms (species): Ceriodaphnia sp.
EC50 96h - Algae [1]	242 mg/l Source: ECOTOX
Partition coefficient n-octanol/water (Log Pow)	-6.19 Source: Quantitative Structure Activity Relation

Sodium bicarbonate (144-55-8)	
LC50 - Fish [1]	7100 mg/l (EPA OPP 72-1, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	4100 mg/l (EPA OPP 72-2, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value, GLP)
NOEC (chronic)	> 576 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	400 mg/l Test organisms (species): Pimephales promelas Duration: '30 d'
Partition coefficient n-octanol/water (Log Pow)	-4.01 (Estimated value)

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
LC50 - Fish [1]	0.19 mg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
LC50 - Fish [2]	0.28 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	0.007 mg/l (48 h, Acartia tonsa, Salt water, Experimental value, GLP)
ErC50 algae	19.9 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Skeletonema costatum, Static system, Salt water, Experimental value, GLP)
NOEC (chronic)	0.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.098 mg/l
NOEC chronic crustacea	3.6 µg/l

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
BCF - Fish [1]	41 – 54 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)

12.2. Persistence and degredability

Protein Rapid Kits- Extraction Buffer	
Persistence and degradability	Not rapidly degradable

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

Ethanol (64-17-5)	
Persistence and degradability	Readily biodegradable.

Excipient	
Persistence and degradability	Readily biodegradable in the soil, Readily biodegradable in water.
ThOD	0.27 g O_2/g substance

Stabilizer	
Persistence and degradability	Readily biodegradable in water.

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

Blocking agent	
Persistence and degradability	Readily biodegradable in water.

Tris hydrochloride (1185-53-1)	
Persistence and degradability	Biodegradability in water: no data available.

Citric acid monohydrate (77-92-9)	
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

Sodium carbonate (497-19-8)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

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

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

Protein Rapid Kits- Extraction Buffer	
Bioaccumulative potential	No additional information available

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

Excipient	
Partition coefficient n-octanol/water (Log Pow)	< -1.73 (Experimental value, EU Method A.8: Partition Coefficient, 22 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	-1.43 – -1.19 (log Koc, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

Stabilizer	
Partition coefficient n-octanol/water (Log Pow)	-1.8 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

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

Tris hydrochloride (1185-53-1)	
Partition coefficient n-octanol/water (Log Pow)	-3.6 Source: ECHA
Bioaccumulative potential	No bioaccumulation data available.

Citric acid monohydrate (77-92-9)	
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.

Sodium carbonate (497-19-8)	
Partition coefficient n-octanol/water (Log Pow)	-6.19 Source: Quantitative Structure Activity Relation
Bioaccumulative potential	Not bioaccumulative.

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

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
BCF - Fish [1]	41 – 54 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Protein Rapid Kits- Extraction Buffer	
Mobility in soil	No additional information available

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

Excipient	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	< -1.73 (Experimental value, EU Method A.8: Partition Coefficient, 22 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	-1.43 – -1.19 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

Stabilizer	
Surface tension	63.4 mN/m (20 °C, 1000 g/l)
Partition coefficient n-octanol/water (Log Pow)	-1.8 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

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.

Tris hydrochloride (1185-53-1)	
Partition coefficient n-octanol/water (Log Pow)	-3.6 Source: ECHA

Citric acid monohydrate (77-92-9)	
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.

Sodium carbonate (497-19-8)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	-6.19 Source: Quantitative Structure Activity Relation
Ecology - soil	Low potential for adsorption in soil.

Sodium bicarbonate (144-55-8)	
Partition coefficient n-octanol/water (Log Pow)	-4.01 (Estimated value)
Ecology - soil	No (test)data on mobility of the substance available.

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
Mobility in soil	12.08 Source: EPISUITE

5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-0ne [EC No 220-239-6] {1 part of}, mixture of (55965-84-9)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse affects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal consideration

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) ETHANOL (64-17-5) Excipient Stabilizer SODIUM CHLORIDE (7647-14-5) Blocking agent 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride (1185-53-1) 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (77-92-9) Carbonic acid disodium salt (497-19-8) Carbonic acid monosodium salt (144-55-8) 3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixt. with 2-methyl-3(2H)-isothiazolone (55965-84-9)
Controlled Chemical for Manufacture of Explosives or Explosives Ingredients (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	Additives approved only for use as food processing	Stabilizer Citric acid monohydrate (77-92-9) Sodium carbonate (497-19-8) Sodium bicarbonate (144-55-8)
	Enzymes permitted for use in food	Sodium chloride (7647-14-5)
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) Sodium carbonate anhydrous (497-19-8) Sodium bicarbonate (144-55-8)

15.2. International regulations

No additional information available

SECTION 16: Other information

Version	:	4.0
Issue date	:	16/06/2025
Revision date	:	22/06/2026
Supersedes	:	22/06/2026

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.