



Kit SDS Cover Sheet

Product Name:

Item No(s):

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, that are biocidal or pesticidal do not require a Safety Data Sheet under the Workplace Hazardous Materials Information System (WHMIS) of Health Canada.

Kit Components:

For product information, please contact your Neogen Corporation Representative.
For further information regarding this SDS, please contact SDS@neogen.com.

SAFETY DATA SHEET

according to Hazardous Products Regulations (HPR)

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Walnut Standards

Revision 1
Revision date 2023-11-20

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Walnut Standards
Product code	(8550)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC21] Laboratory chemicals;
Description	Intended for use in routine analytics, including quality control and monitoring. Do not use components from one kit with any other kit.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshler Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone 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)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - GHS	Skin Sens. 1: H317;
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2.2. Label elements

Hazard pictograms	
Signal Word	Warning
Hazard Statement	Skin Sens. 1: H317 - May cause an allergic skin reaction.
Precautionary Statement: Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

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2.2. Label elements

Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved waste disposal facility in accordance with local and national regulations.
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2.3. Other hazards

Other hazards	Contains material(s) which may be harmful if swallowed.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH No.	Conc. (%w/w)	Classification
1,2-Benzisothiazol-3(2H)-one	613-088-00-6	2634-33-5	220-120-9		0 - 0.5%	Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Dam. 1: H318; Skin Sens. 1: H317; Aquatic Acute 1: H400;

Description

	Concentrations listed are not product specifications.
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Particle Characteristics

	Not applicable.
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Further information

	Full text of Hazard Statements listed in this Section is provided in Section 16.
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SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Inhalation	May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.
Skin contact	May cause irritation to skin. May cause dermatitis.
Ingestion	Ingestion may cause nausea and vomiting.

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

	Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use extinguishing media appropriate to the surrounding fire conditions.
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5.2. Special hazards arising from the substance or mixture

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5.2. Special hazards arising from the substance or mixture

Product does not support combustion. Do not allow undiluted product to be released to ground water, water course or sewage system.

5.3. Advice for firefighters

Do not breathe vapour or spray mist. Wear self-contained breathing apparatus and chemical-protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.

6.2. Environmental precautions

Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.

6.3. Methods and material for containment and cleaning up

Absorb spillage to prevent material damage. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

6.4. Reference to other sections

See Section(s) 2, 8, and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing.
Read the entire label and follow all use directions, restrictions, and precautions.

7.2. Conditions for safe storage, including any incompatibilities

Store at temperatures between 2 °C and 8 °C. Follow label instructions.
Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

Further information

Refer to product label and/or package insert for additional information. Follow label instructions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limits known.

8.2. Exposure controls



8.2.1. Appropriate engineering controls

Ensure adequate ventilation of the working area.

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8.2. Exposure controls

8.2.2. Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Use as appropriate: Suitable eye protection.
Skin protection - Handprotection	Use as appropriate: Chemical-resistant gloves made of any waterproof material. Wash the outside of gloves before removing them.
Skin protection - Other	Use as appropriate: Protective clothing. Wash contaminated clothing, separately from other laundry, with detergent and water before reuse.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure controls	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

Further information

	Remove and wash contaminated clothing before reuse.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Colourless
Odour	Odourless
pH	7 - 7.4
Density / Relative Density	1
Fat Solubility	No data available
Partition coefficient (P)	No data available
Autoignition temperature	No data available
Viscosity	No data available
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Oxidising	No data available
Vapour pressure	No data available
Relative Vapour Density	No data available
Odour threshold	No data available
Flammability limits	Not applicable.
Explosive	Not applicable.
Solubility	Soluble in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

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10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4. Conditions to avoid

Keep away from extreme temperatures.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information

11.1 Information on hazard classes

Acute toxicity	Based on available data, the classification criteria are not met. However, this product does contain substance(s) that are classified as hazardous. For more information, see Section 3.
Skin corrosion/irritation	May cause irritation to skin. May cause dermatitis.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people. May cause sensitisation by skin contact.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No components at >0,01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. No components at >0.01% are listed in the International Agency for Research on Cancer (IARC) Monographs. No components at >0,01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

See Section(s) 3 for further information.

11.1.3. Hazard Information

See Section(s) 2 and 3 for further information.

11.1.4. Toxicological Information

No data available

11.1.5. Hazard Class

See Section(s) 2 and 14 for further information.

11.1.6. Classification Criteria

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11.1.6. Classification Criteria

Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.

11.1.7. Information on likely routes of exposure

Eye contact. Skin contact. Ingestion. Inhalation.

11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

See Section(s) 4.2 for further information.

11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

See Section(s) 4.2 for further information.

11.1.10. Interactive effects

No data available.

11.1.11. Absence of specific data

<1% of this mixture consists of ingredients of unknown acute toxicity.

11.1.12. Mixture versus substance information

See Section(s) 3 for further information.

11.1.13. Other information

No data available.

11.2 Information on other hazards

No data available.

SECTION 12: Ecological information**12.1. Toxicity**

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6 Endocrine disrupting properties

No data is available on this product.

12.7 Other adverse effects

Specific test data for the mixture is not available.

Further information

Keep out of lakes, ponds, or streams. Do not let product contaminate subsoil.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Dispose of in compliance with all local and national regulations. Follow label instructions.

Disposal methods

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Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.
If empty: Do not reuse this container. Place in trash or offer for recycling, if available.
If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14: Transport information

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

14.7 Maritime Transport in bulk according to IMO instruments

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations

WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR).

Contact SDS@neogen.com for additional information. Please specify country or region with your request.

California Proposition 65: This product does not contain reportable substances at >0,0001% concentration.

SECTION 16: Other information

Other information

Revision

This document differs from the previous version in the following areas:.

- 2 - Precautionary Statement: Response.
- 2 - 2.1.2. Classification - GHS.
- 3 - Description.
- 4 - Skin contact.
- 7 - 7.2. Conditions for safe storage, including any incompatibilities.
- 9 - 9.1. Information on basic physical and chemical properties (Fat Solubility).
- 9 - 9.2. Other information (Gas group).
- 11 - Acute toxicity.
- 11 - Skin corrosion/irritation.
- 11 - Respiratory or skin sensitisation.

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Other information

Acronyms	<p>ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR).</p> <p>CAS No.: Chemical Abstracts Service.</p> <p>CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia).</p> <p>FIFRA: U.S. Federal Insecticide, Fungicide, and Rodenticide Act.</p> <p>GHS: Globally Harmonized System.</p> <p>HCS 2012: U.S. Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organisation.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>LD: Lethal dose.</p> <p>OEL: Occupational exposure limit.</p> <p>OSHA: U.S. Occupational Safety and Health Administration.</p> <p>PEL: Permissible Exposure Limit.</p> <p>REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals.</p> <p>STOT: Specific Target Organ Toxicity.</p> <p>SVHC: Substance of very high concern.</p> <p>US DOT: United States Department of Transportation.</p> <p>VOC: Volatile Organic Compound.</p> <p>WEL: Workplace Exposure Limit.</p>
Text of Hazard Statements in Section 3	<p>Acute Tox. 4: H302 - Harmful if swallowed.</p> <p>Skin Irrit. 2: H315 - Causes skin irritation.</p> <p>Skin Sens. 1: H317 - May cause an allergic skin reaction.</p> <p>Eye Dam. 1: H318 - Causes serious eye damage.</p> <p>Aquatic Acute 1: H400 - Very toxic to aquatic life.</p>

Further information

	<p>DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.</p> <p>Except as expressly stated herein, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, USAGE OF TRADE, OR RESULTS TO BE OBTAINED BY USE OF THIS PRODUCT are made with respect to this product or use of this product. The product covered is furnished "as is" and only subject to the warranties herein provided, no liability is assumed resulting from the use of this product.</p>
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SAFETY DATA SHEET

according to Hazardous Products Regulations (HPR)

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Revision 1
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Walnut Conjugate
Product code	(8550)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC21] Laboratory chemicals;
Description	Intended for use in routine analytics, including quality control and monitoring. Do not use components from one kit with any other kit.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshler Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone 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)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - GHS	Skin Sens. 1: H317; Resp. Sens. 1: H334;
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2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Skin Sens. 1: H317 - May cause an allergic skin reaction. Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary Statement: Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P284 - In case of inadequate ventilation, wear respiratory protection.

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2.2. Label elements

Precautionary Statement: Response	P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved waste disposal facility in accordance with local and national regulations.

2.3. Other hazards

Other hazards	Contains material(s) which may be harmful if swallowed.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH No.	Conc. (%w/w)	Classification
Sucrose		57-50-1	200-334-9		1 - 10%	
Peroxidase, from horseradish		9003-99-0	232-668-6		1 - 10%	Resp. Sens. 1: H334;
Sodium azide (Sodium azide As Sodium azide)	011-004-00-7	26628-22-8	247-852-1		0 - <0.1%	Acute Tox. 2: H300; Aquatic Acute 1: H400; Aquatic Chronic 1: H410;
5-Chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] {3 parts of} and 2-Methyl-4-isothiazolin-3-one [EC No 220-239-6] {1 part of}, mixture of	613-167-00-5	55965-84-9			0 - <0.1%	Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Acute 1: H400; Aquatic Chronic 1: H410;

Description

	Concentrations listed are not product specifications.
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Particle Characteristics

	Not applicable.
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Further information

	Full text of Hazard Statements listed in this Section is provided in Section 16.
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SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Inhalation	May cause irritation to respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye contact	May cause irritation to eyes.

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

Skin contact	May cause irritation to skin. May cause dermatitis.
Ingestion	Ingestion may cause nausea and vomiting.

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

	Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use extinguishing media appropriate to the surrounding fire conditions.
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5.2. Special hazards arising from the substance or mixture

	Product does not support combustion. Do not allow undiluted product to be released to ground water, water course or sewage system.
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5.3. Advice for firefighters

	Do not breathe vapour or spray mist. Wear self-contained breathing apparatus and chemical-protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.
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6.2. Environmental precautions

	Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.
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6.3. Methods and material for containment and cleaning up

	Absorb spillage to prevent material damage. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.
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6.4. Reference to other sections

	See Section(s) 2, 8, and 13 for further information.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing. Read the entire label and follow all use directions, restrictions, and precautions.
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7.2. Conditions for safe storage, including any incompatibilities

	Store at temperatures between 2 °C and 8 °C. Follow label instructions. Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal.
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7.3. Specific end use(s)

	See Section(s) 1.2 for further information.
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Further information

	Refer to product label and/or package insert for additional information. Follow label instructions.
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Walnut Conjugate


Revision 1
Revision date 2023-11-20**SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

8.1.1. Exposure Limit Values

Glycerin (Glycerin mist)	8-hour OEL ppm: 8-hour OEL f/cc: 15-min or ceiling (c) OEL mg/m3:	8-hour OEL mg/m3: 10 15-min or ceiling (c) OEL ppm: Substance interaction 1,2,3: 3
Sodium azide (Sodium azide As Hydrazoic acid vapours)	8-hour OEL ppm: 8-hour OEL f/cc: 15-min or ceiling (c) OEL mg/m3:	8-hour OEL mg/m3: 15-min or ceiling (c) OEL ppm: (c) 0.11 Substance interaction 1,2,3:
Sodium azide (Sodium azide As Sodium azide)	8-hour OEL ppm: 8-hour OEL f/cc: 15-min or ceiling (c) OEL mg/m3: (c) 0.29	8-hour OEL mg/m3: 15-min or ceiling (c) OEL ppm: Substance interaction 1,2,3:
Sucrose	8-hour OEL ppm: 8-hour OEL f/cc: 15-min or ceiling (c) OEL mg/m3:	8-hour OEL mg/m3: 10 15-min or ceiling (c) OEL ppm: Substance interaction 1,2,3:

8.2. Exposure controls

	
8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Use as appropriate: Suitable eye protection.
Skin protection - Handprotection	Use as appropriate: Chemical-resistant gloves made of any waterproof material. Wash the outside of gloves before removing them.
Skin protection - Other	Use as appropriate: Protective clothing. Wash contaminated clothing, separately from other laundry, with detergent and water before reuse.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure controls	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

Further information

	Remove and wash contaminated clothing before reuse.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Colourless
Odour	Odourless
pH	7 - 7.4
Density / Relative Density	1
Fat Solubility	No data available
Partition coefficient (P)	No data available
Autoignition temperature	No data available
Viscosity	No data available
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Oxidising	No data available
Vapour pressure	No data available
Relative Vapour Density	No data available
Odour threshold	No data available
Flammability limits	Not applicable.
Explosive	Not applicable.
Solubility	Soluble in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
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10.2. Chemical stability

	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

	Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.
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10.4. Conditions to avoid

	Keep away from extreme temperatures.
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10.5. Incompatible materials

	No data available.
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10.6. Hazardous decomposition products

	Carbon oxides.
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SECTION 11: Toxicological information

Walnut Conjugate

Revision 1
Revision date 2023-11-20

11.1 Information on hazard classes

Acute toxicity	Based on available data, the classification criteria are not met. However, this product does contain substance(s) that are classified as hazardous. For more information, see Section 3.
Skin corrosion/irritation	May cause irritation to skin. May cause dermatitis.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people. May cause sensitisation by inhalation and skin contact.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No components at >0,01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. No components at >0.01% are listed in the International Agency for Research on Cancer (IARC) Monographs. No components at >0,01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

	See Section(s) 3 for further information.
--	---

11.1.3. Hazard Information

	See Section(s) 2 and 3 for further information.
--	---

11.1.4. Toxicological Information

	No data available
--	-------------------

11.1.5. Hazard Class

	See Section(s) 2 and 14 for further information.
--	--

11.1.6. Classification Criteria

	Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.
--	---

11.1.7. Information on likely routes of exposure

	Eye contact. Skin contact. Ingestion. Inhalation.
--	---

11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

	See Section(s) 4.2 for further information.
--	---

11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

	See Section(s) 4.2 for further information.
--	---

11.1.10. Interactive effects

	No data available.
--	--------------------

11.1.11. Absence of specific data

	<1% of this mixture consists of ingredients of unknown acute toxicity.
--	--

11.1.12. Mixture versus substance information

	See Section(s) 3 for further information.
--	---

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11.1.13. Other information

No data available.

11.2 Information on other hazards

No data available.

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6 Endocrine disrupting properties

No data is available on this product.

12.7 Other adverse effects

Specific test data for the mixture is not available.

Further information

Keep out of lakes, ponds, or streams. Do not let product contaminate subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in compliance with all local and national regulations. Follow label instructions.

Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.

If empty: Do not reuse this container. Place in trash or offer for recycling, if available.

If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14: Transport information

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

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14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

14.7 Maritime Transport in bulk according to IMO instruments

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations	WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR).
	Contact SDS@neogen.com for additional information. Please specify country or region with your request.
	California Proposition 65: This product does not contain reportable substances at >0,0001% concentration.

SECTION 16: Other information

Other information

Revision	<p>This document differs from the previous version in the following areas:</p> <ul style="list-style-type: none"> 2 - 2.1. Classification of the substance or mixture. 2 - 2.1.2. Classification - GHS. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - 2.1.2. Classification - GHS. 3 - Description. 4 - Inhalation. 4 - Skin contact. 7 - 7.2. Conditions for safe storage, including any incompatibilities. 8 - 8.1. Control parameters. 9 - 9.1. Information on basic physical and chemical properties (Fat Solubility). 9 - 9.2. Other information (Gas group). 11 - Acute toxicity. 11 - Skin corrosion/irritation. 11 - Respiratory or skin sensitisation. 12 - 12.1. Toxicity. 15 - Labelling. 15 - Hazard Statement. 15 - Safety phrases.
Acronyms	<p>ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR).</p> <p>CAS No.: Chemical Abstracts Service.</p> <p>CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia).</p> <p>FIFRA: U.S. Federal Insecticide, Fungicide, and Rodenticide Act.</p> <p>GHS: Globally Harmonized System.</p> <p>HCS 2012: U.S. Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organisation.</p> <p>IMDG: International Maritime Dangerous Goods.</p>

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Other information

<p>Text of Hazard Statements in Section 3</p>	<p>LD: Lethal dose. OEL: Occupational exposure limit. OSHA: U.S. Occupational Safety and Health Administration. PEL: Permissible Exposure Limit. REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals. STOT: Specific Target Organ Toxicity. SVHC: Substance of very high concern. US DOT: United States Department of Transportation. VOC: Volatile Organic Compound. WEL: Workplace Exposure Limit.</p> <hr/> <p>Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. EUH032 - Contact with acids liberates very toxic gas. Acute Tox. 2: H300 - Fatal if swallowed. Aquatic Acute 1: H400 - Very toxic to aquatic life. Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects. Acute Tox. 3: H301 - Toxic if swallowed. Acute Tox. 3: H311 - Toxic in contact with skin. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1: H317 - May cause an allergic skin reaction. Eye Irrit. 2: H319 - Causes serious eye irritation. Acute Tox. 3: H331 - Toxic if inhaled.</p>
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Further information

	<p>DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.</p> <p>Except as expressly stated herein, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, USAGE OF TRADE, OR RESULTS TO BE OBTAINED BY USE OF THIS PRODUCT are made with respect to this product or use of this product. The product covered is furnished "as is" and only subject to the warranties herein provided, no liability is assumed resulting from the use of this product.</p>
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SAFETY DATA SHEET

according to Hazardous Products Regulations (HPR)

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K-Blue® Advanced Plus TMB Substrate

Revision 2
Revision date 2023-03-16

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	K-Blue® Advanced Plus TMB Substrate
Product code	379171, 379175, 379176, 379177, 379257, 379xxx

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC21] Laboratory chemicals;
Description	Intended for use in routine analytics, including quality control and monitoring.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshar Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone 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

2.1.2. Classification - GHS	Based on available data, this product is not classified as hazardous.
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2.2. Label elements

Hazard Statement	No Significant Hazard
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2.3. Other hazards

Other hazards	Contains material(s) which may be harmful if swallowed.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

K-Blue® Advanced Plus TMB Substrate

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3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH No.	Conc. (%w/w)	Classification
Dimethyl sulfoxide		67-68-5	200-664-3		1 - <10%	Flam. Liq. 4: H227; Skin Irrit. 2: H315; Eye Irrit. 2: H319;
Urea hydrogen peroxide		124-43-6	204-701-4		0 - <0.5%	Ox. Sol. 3: H272; Skin Corr. 1B: H314; Eye Dam. 1: H318;

Description

Concentrations listed are not product specifications.

Particle Characteristics

Not applicable.

Further information

Full text of Hazard Statements listed in this Section is provided in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Inhalation	May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.
Skin contact	May cause irritation to skin.
Ingestion	Ingestion may cause nausea and vomiting.

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

	Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.
--	--

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use extinguishing media appropriate to the surrounding fire conditions.

5.2. Special hazards arising from the substance or mixture

Not classifiable as flammable, but this product contains flammable substance(s) at <10.0%. Do not allow undiluted product to be released to ground water, water course or sewage system.

5.3. Advice for firefighters

Do not breathe vapour or spray mist. Wear self-contained breathing apparatus and chemical-protective clothing.

K-Blue® Advanced Plus TMB Substrate

Revision 2
Revision date 2023-03-16**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.

6.2. Environmental precautions

Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.

6.3. Methods and material for containment and cleaning up

Absorb spillage to prevent material damage. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

6.4. Reference to other sections

See Section(s) 2, 8, and 13 for further information.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing.
Read the entire label and follow all use directions, restrictions, and precautions.

7.2. Conditions for safe storage, including any incompatibilities

Store at temperatures between 2 °C and 30 °C. Follow label instructions.
Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

Further information

Refer to product label and/or package insert for additional information. Follow label instructions.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

No occupational exposure limits known.

8.2. Exposure controls**8.2.1. Appropriate engineering controls**

Ensure adequate ventilation of the working area.

8.2.2. Individual protection measures

Use as appropriate: Protective equipment.

Eye / face protection

Use as appropriate: Suitable eye protection.

Skin protection - Handprotection

Use as appropriate: Chemical-resistant gloves made of any waterproof material. Wash the outside of gloves before removing them.

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8.2. Exposure controls

Skin protection - Other	Use as appropriate: Protective clothing. Wash contaminated clothing, separately from other laundry, with detergent and water before reuse.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure controls	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

Further information

	Remove and wash contaminated clothing before reuse.
--	---

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Clear/Colourless
Odour	Odourless
Odour threshold	No data available
pH	3.1 - 3.4
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapour pressure	No data available
Relative Vapour Density	No data available
Density / Relative Density	No data available
Partition coefficient (P)	No data available
Autoignition temperature	Not applicable.
Viscosity	No data available
Explosive	Not applicable.
Oxidising	No data available
Solubility	Soluble in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
--	---------------------------------

10.2. Chemical stability

	Stable under normal conditions.
--	---------------------------------

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10.3. Possibility of hazardous reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4. Conditions to avoid

Keep away from extreme temperatures.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information

11.1 Information on hazard classes

Acute toxicity	Based on available data, the classification criteria are not met. However, this product does contain substance(s) that are classified as hazardous. For more information, see Section 3.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No components at >0,01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. No components at >0.01% are listed in the International Agency for Research on Cancer (IARC) Monographs. No components at >0,01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

See Section(s) 3 for further information.

11.1.3. Hazard Information

See Section(s) 2 and 3 for further information.

11.1.4. Toxicological Information

No data available

11.1.5. Hazard Class

See Section(s) 2 and 14 for further information.

11.1.6. Classification Criteria

Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.

11.1.7. Information on likely routes of exposure

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11.1.7. Information on likely routes of exposure

Eye contact. Skin contact. Ingestion. Inhalation.

11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

See Section(s) 4.2 for further information.

11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

See Section(s) 4.2 for further information.

11.1.10. Interactive effects

No data available.

11.1.11. Absence of specific data

<1% of this mixture consists of ingredients of unknown acute toxicity.

11.1.12. Mixture versus substance information

See Section(s) 3 for further information.

11.1.13. Other information

No data available.

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6 Endocrine disrupting properties

No data is available on this product.

12.7 Other adverse effects

Specific test data for the mixture is not available.

Further information

Keep out of lakes, ponds, or streams. Do not let product contaminate subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in compliance with all local and national regulations. Follow label instructions.

Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

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Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.
 If empty: Do not reuse this container. Place in trash or offer for recycling, if available.
 If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14: Transport information

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

14.7 Maritime Transport in bulk according to IMO instruments

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations

WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR).

--International--.

Basel Convention (Hazardous Waste): Not applicable.

Chemical Weapons Convention (OPCW): This product contains no hazardous substances at or above published reporting levels.

Kyoto Protocol Greenhouse Gases: This product contains no hazardous substances at or above published reporting levels.

Mercosur Agreement: Applicable.

Montreal Protocol: This product contains no hazardous substances at or above published reporting levels.

The Rotterdam Convention: This product contains no hazardous substances at or above published reporting levels.

The Stockholm Convention: This product contains no hazardous substances at or above published reporting levels.

--Asia and the ASEAN Nations--.

Catalog of Hazardous Chemicals (China): [899, Urea peroxide, CAS No. 124-43-6 (<0.1%)].

Regulation of Minister of Trade of the Republic of Indonesia, Number 75, Year 2014, regarding The Second Amendment of Minister of Trade, Number 44, Year 2009, Regarding Provision, Distribution, and Control of Hazardous Substances: This product contains no hazardous substances at or above published reporting levels.

Air Pollution Control Law (Japan): This product contains no hazardous substances at or above

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

published reporting levels.

Chemical Substances Control Law (Japan): This product contains no hazardous substances at or above published reporting levels.

Industrial Safety and Health Act, Dangerous Substances (Japan): This product contains no hazardous substances at or above published reporting levels.

Poisonous and Deleterious Substances Act (Japan): This product contains no hazardous substances at or above published reporting levels.

PRTR-SDS Law (Japan): This product contains no hazardous substances at or above published reporting levels.

Soil Contamination Countermeasures Act (Japan): This product contains no hazardous substances at or above published reporting levels.

Water Pollution Control Law (Japan): This product contains no hazardous substances at or above published reporting levels.

Chemical Substances Subject to Permission (Korea): This product contains no hazardous substances at or above published reporting levels.

Restricted or Prohibited Substances (Korea): This product contains no hazardous substances at or above published reporting levels.

Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This product contains no hazardous substances at or above published reporting levels.

Philippine Inventory of Chemicals and Chemical Substances (PICCS): Toxic Substances and Hazardous and Nuclear Wastes Control Act (RA6969);, All ingredients listed or exempt., No restrictions.

Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This product contains no hazardous substances at or above published reporting levels.

Hazardous Substances Act (Thailand): This product contains no hazardous substances at or above published reporting levels.

Law on Chemicals (Vietnam): Decree 113/2017/ND-CP: List of chemicals subject to compulsory declaration, Decree 113/2017/ND-CP: List of chemicals subject to conditional industrial production and trading, [Urea peroxide, CAS No. 124-43-6 (<0.1%)].

--Australia and New Zealand--.

Australian Dangerous Goods Code: Not applicable.

Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt., No restrictions.

New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt., No restrictions.

--European Union (EU) and the United Kingdom (UK)--.

Authorisation List (Annex XIV of REACH): This product contains no hazardous substances at or above published reporting levels.

Annex XVII for REACH: This product contains no hazardous substances at or above published reporting levels, No restrictions.

Article 95 of the Biocidal Products Regulation (BPR): Not applicable.

--North America--.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt., No restrictions.

Toxic Substances Control Act (TSCA): All ingredients listed or exempt.

Massachusetts Right-to-Know Hazardous Substance List: This product contains no hazardous substances at or above published reporting levels.

New Jersey Worker and Community Right to Know Act: Dimethyl sulfoxide, CAS No.67-68-5.

Pennsylvania Right to Know Law: This product contains no hazardous substances at or above published reporting levels.

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

	<p>Rhode Island Right-to-Know General Law: This product contains no hazardous substances at or above published reporting levels.</p> <p>California Proposition 65: This product does not contain reportable substances at >0,0001% concentration.</p>
--	--

SECTION 16: Other information

Other information

Revision	<p>This document differs from the previous version in the following areas:.</p> <p>1 - Description. 3 - Description. 3 - Particle Characteristics. 5 - 5.2. Special hazards arising from the substance or mixture. 7 - 7.2. Conditions for safe storage, including any incompatibilities. 9 - 9.2. Other information (Gas group). 11 - Acute toxicity. 15 -.</p>
Acronyms	<p>ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR). CAS No.: Chemical Abstracts Service. CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia). FIFRA: U.S. Federal Insecticide, Fungicide, and Rodenticide Act. GHS: Globally Harmonized System. HCS 2012: U.S. Hazard Communication Standard (2012 revision). IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation. IMDG: International Maritime Dangerous Goods. LD: Lethal dose. OEL: Occupational exposure limit. OSHA: U.S. Occupational Safety and Health Administration. PEL: Permissible Exposure Limit. REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals. STOT: Specific Target Organ Toxicity. SVHC: Substance of very high concern. US DOT: United States Department of Transportation. VOC: Volatile Organic Compound. WEL: Workplace Exposure Limit.</p>
Text of Hazard Statements in Section 3	<p>Flam. Liq. 4: H227 - Combustible liquid. Skin Irrit. 2: H315 - Causes skin irritation. Eye Irrit. 2: H319 - Causes serious eye irritation. Ox. Sol. 3: H272 - May intensify fire; oxidiser. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Eye Dam. 1: H318 - Causes serious eye damage.</p>

Further information

	<p>DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.</p>
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Further information

Except as expressly stated herein, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, USAGE OF TRADE, OR RESULTS TO BE OBTAINED BY USE OF THIS PRODUCT are made with respect to this product or use of this product. The product covered is furnished "as is" and only subject to the warranties herein provided, no liability is assumed resulting from the use of this product.



SAFETY DATA SHEET

according to Hazardous Products Regulations (HPR)

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Red Stop Solution

Revision 7
Revision date 2023-03-16

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Red Stop Solution
Product code	301210, 301471, 301473, 301474, 301475, 301476

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC21] Laboratory chemicals;
Description	Intended for use in routine analytics, including quality control and monitoring.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshler Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone 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

2.1.2. Classification - GHS	Based on available data, this product is not classified as hazardous.
-----------------------------	---

2.2. Label elements

Hazard Statement	No Significant Hazard
------------------	-----------------------

2.3. Other hazards

Other hazards	Contains material(s) which may be harmful if swallowed.
---------------	---

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Red Stop Solution

Revision 7
Revision date 2023-03-16

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH No.	Conc. (%w/w)	Classification
Sodium fluoride.		7681-49-4	231-667-8		0 - 0.5%	Acute Tox. 3: H301; Skin Corr. 1C: H314; Eye Irrit. 2: H319; Aquatic Acute 3: H402;

Description

Concentrations listed are not product specifications.

Particle Characteristics

Not applicable.

Further information

Full text of Hazard Statements listed in this Section is provided in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Inhalation	May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.
Skin contact	May cause irritation to skin.
Ingestion	Ingestion may cause nausea and vomiting.

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

Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use extinguishing media appropriate to the surrounding fire conditions.

5.2. Special hazards arising from the substance or mixture

Product does not support combustion. Do not allow undiluted product to be released to ground water, water course or sewage system.

5.3. Advice for firefighters

Do not breathe vapour or spray mist. Wear self-contained breathing apparatus and chemical-protective clothing.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.

6.2. Environmental precautions

Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.

6.3. Methods and material for containment and cleaning up

Absorb spillage to prevent material damage. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

6.4. Reference to other sections

See Section(s) 2, 8, and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing.
Read the entire label and follow all use directions, restrictions, and precautions.

7.2. Conditions for safe storage, including any incompatibilities

Store at temperatures between 2 °C and 30 °C. Follow label instructions.
Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

Further information

Refer to product label and/or package insert for additional information. Follow label instructions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limits known.

8.2. Exposure controls



8.2.1. Appropriate engineering controls

Ensure adequate ventilation of the working area.

8.2.2. Individual protection measures

Use as appropriate: Protective equipment.

Eye / face protection

Use as appropriate: Suitable eye protection.

Skin protection - Handprotection

Use as appropriate: Chemical-resistant gloves made of any waterproof material. Wash the outside of gloves before removing them.

Skin protection - Other

Use as appropriate: Protective clothing. Wash contaminated clothing, separately from other laundry, with detergent and water before reuse.

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8.2. Exposure controls

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure controls	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

Further information

	Remove and wash contaminated clothing before reuse.
--	---

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Clear/Red
Odour	Characteristic
Odour threshold	No data available
pH	8.7
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapour pressure	No data available
Relative Vapour Density	No data available
Density / Relative Density	No data available
Partition coefficient (P)	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive	Not applicable.
Oxidising	No data available
Solubility	Soluble in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
--	---------------------------------

10.2. Chemical stability

	Stable under normal conditions.
--	---------------------------------

10.3. Possibility of hazardous reactions

	Under the specified conditions, hazardous reactions that lead to excessive temperatures or
--	--

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10.3. Possibility of hazardous reactions

pressure are not expected.

10.4. Conditions to avoid

Keep away from extreme temperatures.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information

11.1 Information on hazard classes

Acute toxicity	Based on available data, the classification criteria are not met. However, this product does contain substance(s) that are classified as hazardous. For more information, see Section 3.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No components at >0,01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. No components at >0.01% are listed in the International Agency for Research on Cancer (IARC) Monographs. No components at >0,01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

See Section(s) 3 for further information.

11.1.3. Hazard Information

See Section(s) 2 and 3 for further information.

11.1.4. Toxicological Information

No data available

11.1.5. Hazard Class

See Section(s) 2 and 14 for further information.

11.1.6. Classification Criteria

Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.

11.1.7. Information on likely routes of exposure

Eye contact. Skin contact. Ingestion. Inhalation.

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11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

See Section(s) 4.2 for further information.

11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

See Section(s) 4.2 for further information.

11.1.10. Interactive effects

No data available.

11.1.11. Absence of specific data

<1% of this mixture consists of ingredients of unknown acute toxicity.

11.1.12. Mixture versus substance information

See Section(s) 3 for further information.

11.1.13. Other information

No data available.

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6 Endocrine disrupting properties

No data is available on this product.

12.7 Other adverse effects

Specific test data for the mixture is not available.

Further information

Keep out of lakes, ponds, or streams. Do not let product contaminate subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in compliance with all local and national regulations. Follow label instructions.

Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.
If empty: Do not reuse this container. Place in trash or offer for recycling, if available.
If partly filled: Call your local solid waste agency for disposal instructions. Never place unused

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Disposal of packaging

product down any indoor or outdoor drain.

SECTION 14: Transport information

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

14.7 Maritime Transport in bulk according to IMO instruments

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations

WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR).

--International--.

Basel Convention (Hazardous Waste): Not applicable.

Chemical Weapons Convention (OPCW): This product contains no hazardous substances at or above published reporting levels.

Kyoto Protocol Greenhouse Gases: This product contains no hazardous substances at or above published reporting levels.

Mercosur Agreement: Applicable.

Montreal Protocol: This product contains no hazardous substances at or above published reporting levels.

The Rotterdam Convention: This product contains no hazardous substances at or above published reporting levels.

The Stockholm Convention: This product contains no hazardous substances at or above published reporting levels.

--Asia and the ASEAN Nations--.

Catalog of Hazardous Chemicals (China): [754, Sodium fluoride, CAS No. 7681-49-4 (<0.5%)].

Regulation of Minister of Trade of the Republic of Indonesia, Number 75, Year 2014, regarding The Second Amendment of Minister of Trade, Number 44, Year 2009, Regarding Provision, Distribution, and Control of Hazardous Substances: This product contains no hazardous substances at or above published reporting levels.

Air Pollution Control Law (Japan): Hazardous substance / Priority chemicals, [Sodium fluoride (fluorine compounds), CAS No. 7681-49-4 (<0.5%)].

Chemical Substances Control Law (Japan): This product contains no hazardous substances at or above published reporting levels.

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Industrial Safety and Health Act, Dangerous Substances (Japan): Labeling/Notification required, [Sodium fluoride (fluorine compounds), CAS No. 7681-49-4 (<0.5%)].

Poisonous and Deleterious Substances Act (Japan): This product contains no hazardous substances at or above published reporting levels.

PRTR-SDS Law (Japan): Class I environmental release, [374, Sodium fluoride (fluorine compounds), CAS No. 7681-49-4 (<0.5%)].

Soil Contamination Countermeasures Act (Japan): Class 2, [Sodium fluoride (fluorine compounds), CAS No. 7681-49-4 (<0.5%)].

Water Pollution Control Law (Japan): Harmful substance, [Sodium fluoride (fluorine compounds), CAS No. 7681-49-4 (<0.5%)].

Chemical Substances Subject to Permission (Korea): This product contains no hazardous substances at or above published reporting levels.

Restricted or Prohibited Substances (Korea): This product contains no hazardous substances at or above published reporting levels.

Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This product contains no hazardous substances at or above published reporting levels.

Philippine Inventory of Chemicals and Chemical Substances (PICCS): Toxic Substances and Hazardous and Nuclear Wastes Control Act (RA6969):, All ingredients listed or exempt., No restrictions.

Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This product contains no hazardous substances at or above published reporting levels.

Hazardous Substances Act (Thailand): This product contains no hazardous substances at or above published reporting levels.

Law on Chemicals (Vietnam): Decree 113/2017/ND-CP: List of chemicals subject to compulsory declaration, Decree 113/2017/ND-CP: List of chemicals subject to conditional industrial production and trading, [Sodium fluoride, CAS No. 7681-49-4 (<0.5%)].

--Australia and New Zealand--.

Australian Dangerous Goods Code: Not applicable.

Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt., No restrictions.

New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt., No restrictions.

--European Union (EU) and the United Kingdom (UK)--.

Authorisation List (Annex XIV of REACH): This product contains no hazardous substances at or above published reporting levels.

Annex XVII for REACH: This product contains no hazardous substances at or above published reporting levels, No restrictions.

Article 95 of the Biocidal Products Regulation (BPR): Not applicable.

--North America--.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt., No restrictions.

Toxic Substances Control Act (TSCA): All ingredients listed or exempt.

Massachusetts Right-to-Know Hazardous Substance List: This product contains no hazardous substances at or above published reporting levels.

New Jersey Worker and Community Right to Know Act: This product contains no hazardous substances at or above published reporting levels.

Pennsylvania Right to Know Law: This product contains no hazardous substances at or above published reporting levels.

Rhode Island Right-to-Know General Law: This product contains no hazardous substances at or above published reporting levels.

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

California Proposition 65: This product does not contain reportable substances at >0,0001% concentration.

SECTION 16: Other information

Other information

Revision	<p>This document differs from the previous version in the following areas:.</p> <ul style="list-style-type: none"> 1 - Description. 3 - Description. 3 - Particle Characteristics. 7 - 7.2. Conditions for safe storage, including any incompatibilities. 9 - 9.2. Other information (Gas group). 11 - Acute toxicity. 15 -.
Acronyms	<p>ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR).</p> <p>CAS No.: Chemical Abstracts Service.</p> <p>CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia).</p> <p>FIFRA: U.S. Federal Insecticide, Fungicide, and Rodenticide Act.</p> <p>GHS: Globally Harmonized System.</p> <p>HCS 2012: U.S. Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organisation.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>LD: Lethal dose.</p> <p>OEL: Occupational exposure limit.</p> <p>OSHA: U.S. Occupational Safety and Health Administration.</p> <p>PEL: Permissible Exposure Limit.</p> <p>REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals.</p> <p>STOT: Specific Target Organ Toxicity.</p> <p>SVHC: Substance of very high concern.</p> <p>US DOT: United States Department of Transportation.</p> <p>VOC: Volatile Organic Compound.</p> <p>WEL: Workplace Exposure Limit.</p>
Text of Hazard Statements in Section 3	<p>Acute Tox. 3: H301 - Toxic if swallowed.</p> <p>Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.</p> <p>Eye Irrit. 2: H319 - Causes serious eye irritation.</p> <p>Aquatic Acute 3: H402 - Harmful to aquatic life.</p>

Further information

DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.

Except as expressly stated herein, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, USAGE OF TRADE, OR RESULTS TO BE OBTAINED BY USE OF THIS

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Further information

	PRODUCT are made with respect to this product or use of this product. The product covered is furnished "as is" and only subject to the warranties herein provided, no liability is assumed resulting from the use of this product.
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SAFETY DATA SHEET

according to Hazardous Products Regulations (HPR)

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Walnut WXB Extraction Buffer

Revision 2
Revision date 2023-11-20

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Walnut WXB Extraction Buffer
Product code	24437, 400000179

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC21] Laboratory chemicals;
Description	Intended for use in routine analytics, including quality control and monitoring. Do not use components from one kit with any other kit.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshler Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone 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

2.1.2. Classification - GHS	Skin Irrit. 2: H315; Eye Irrit. 2: H319;
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2.2. Label elements

Hazard pictograms	
Signal Word	Warning
Hazard Statement	Skin Irrit. 2: H315 - Causes skin irritation. Eye Irrit. 2: H319 - Causes serious eye irritation.
Precautionary Statement: Prevention	P264 - Wash thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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2.2. Label elements

	P321 - Specific treatment (see on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.
--	---

2.3. Other hazards

Other hazards	Contains material(s) which may be harmful if swallowed.
---------------	---

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH No.	Conc. (%w/w)	Classification
Magnesium nitrate		10377-60-3	233-826-7		1 - 10%	Ox. Sol. 2: H272; Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335;

Description

	Concentrations listed are not product specifications.
--	---

Particle Characteristics

	Not applicable.
--	-----------------

Further information

	Full text of Hazard Statements listed in this Section is provided in Section 16.
--	--

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Inhalation	May cause irritation to respiratory system.
Eye contact	Causes serious eye irritation.
Skin contact	Causes skin irritation.
Ingestion	Ingestion may cause nausea and vomiting.

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

	Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.
--	--

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use extinguishing media appropriate to the surrounding fire conditions.
--	---

5.2. Special hazards arising from the substance or mixture

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5.2. Special hazards arising from the substance or mixture

Irritant. Product does not support combustion. Do not allow undiluted product to be released to ground water, water course or sewage system.

5.3. Advice for firefighters

Do not breathe vapour or spray mist. Wear self-contained breathing apparatus and chemical-protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.

6.2. Environmental precautions

Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.

6.3. Methods and material for containment and cleaning up

Absorb spillage to prevent material damage. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

6.4. Reference to other sections

See Section(s) 2, 8, and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing.
Read the entire label and follow all use directions, restrictions, and precautions.

7.2. Conditions for safe storage, including any incompatibilities

Store at temperatures between 2 °C and 30 °C. Follow label instructions.
Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

Further information

Refer to product label and/or package insert for additional information. Follow label instructions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure Limit Values


Sodium hydroxide	8-hour OEL ppm:	8-hour OEL mg/m3:
	8-hour OEL f/cc:	15-min or ceiling (c) OEL ppm:
	15-min or ceiling (c) OEL mg/m3: (c) 2	Substance interaction 1,2,3: 3

8.2. Exposure controls

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8.2. Exposure controls

	
8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Use as appropriate: Suitable eye protection.
Skin protection - Handprotection	Use as appropriate: Chemical-resistant gloves made of any waterproof material. Wash the outside of gloves before removing them.
Skin protection - Other	Use as appropriate: Protective clothing. Wash contaminated clothing, separately from other laundry, with detergent and water before reuse.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure controls	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

Further information

	Remove and wash contaminated clothing before reuse.
--	---

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Cloudy
Odour	Odourless
Odour threshold	No data available
pH	7 - 7.4
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapour pressure	No data available
Relative Vapour Density	No data available
Density / Relative Density	1
Fat Solubility	No data available
Partition coefficient (P)	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive	No data available
Oxidising	No data available
Solubility	Soluble in water

9.2. Other information

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9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
--	---------------------------------

10.2. Chemical stability

	Stable under normal conditions.
--	---------------------------------

10.3. Possibility of hazardous reactions

	Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.
--	---

10.4. Conditions to avoid

	Keep away from extreme temperatures.
--	--------------------------------------

10.5. Incompatible materials

	No data available.
--	--------------------

10.6. Hazardous decomposition products

	Carbon oxides.
--	----------------

SECTION 11: Toxicological information

11.1 Information on hazard classes

Acute toxicity	Based on available data, the classification criteria are not met. However, this product does contain substance(s) that are classified as hazardous. For more information, see Section 3.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No components at >0,01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. No components at >0.01% are listed in the International Agency for Research on Cancer (IARC) Monographs. No components at >0,01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

Walnut WXB Extraction Buffer

Revision 2
Revision date 2023-11-20

11.1.2. Mixtures

See Section(s) 3 for further information.

11.1.3. Hazard Information

See Section(s) 2 and 3 for further information.

11.1.4. Toxicological Information

No data available

11.1.5. Hazard Class

See Section(s) 2 and 14 for further information.

11.1.6. Classification Criteria

Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures.
See Section 15 for regulatory citations.

11.1.7. Information on likely routes of exposure

Eye contact. Skin contact. Ingestion. Inhalation.

11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

See Section(s) 4.2 for further information.

11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

See Section(s) 4.2 for further information.

11.1.10. Interactive effects

No data available.

11.1.11. Absence of specific data

<1% of this mixture consists of ingredients of unknown acute toxicity.

11.1.12. Mixture versus substance information

See Section(s) 3 for further information.

11.1.13. Other information

No data available.

11.2 Information on other hazards

No data available.

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6 Endocrine disrupting properties

No data is available on this product.

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12.7 Other adverse effects

Specific test data for the mixture is not available.

Further information

Keep out of lakes, ponds, or streams. Do not let product contaminate subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in compliance with all local and national regulations. Follow label instructions.

Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.
If empty: Do not reuse this container. Place in trash or offer for recycling, if available.
If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14: Transport information

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

14.7 Maritime Transport in bulk according to IMO instruments

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations

WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR).

Contact SDS@neogen.com for additional information. Please specify country or region with your request.

California Proposition 65: This product does not contain reportable substances at >0,0001% concentration.

SECTION 16: Other information

Other information

Revision

This document differs from the previous version in the following areas:.

Walnut WXB Extraction Buffer

Revision 2
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Other information

	<p>2 - Precautionary Statement: Response. 4 - Eye contact. 4 - Skin contact. 5 - 5.2. Special hazards arising from the substance or mixture. 7 - 7.2. Conditions for safe storage, including any incompatibilities. 8 - 8.1. Control parameters. 9 - 9.1. Information on basic physical and chemical properties (Fat Solubility). 9 - 9.2. Other information (Gas group). 11 - Skin corrosion/irritation. 11 - Serious eye damage/irritation.</p>
Acronyms	<p>ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR). CAS No.: Chemical Abstracts Service. CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia). FIFRA: U.S. Federal Insecticide, Fungicide, and Rodenticide Act. GHS: Globally Harmonized System. HCS 2012: U.S. Hazard Communication Standard (2012 revision). IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation. IMDG: International Maritime Dangerous Goods. LD: Lethal dose. OEL: Occupational exposure limit. OSHA: U.S. Occupational Safety and Health Administration. PEL: Permissible Exposure Limit. REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals. STOT: Specific Target Organ Toxicity. SVHC: Substance of very high concern. US DOT: United States Department of Transportation. VOC: Volatile Organic Compound. WEL: Workplace Exposure Limit.</p>
Text of Hazard Statements in Section 3	<p>Ox. Sol. 2: H272 - May intensify fire; oxidiser. Skin Irrit. 2: H315 - Causes skin irritation. Eye Irrit. 2: H319 - Causes serious eye irritation. STOT SE 3: H335 - May cause respiratory irritation.</p>

Further information

	<p>DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.</p> <p>Except as expressly stated herein, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, USAGE OF TRADE, OR RESULTS TO BE OBTAINED BY USE OF THIS PRODUCT are made with respect to this product or use of this product. The product covered is furnished "as is" and only subject to the warranties herein provided, no liability is assumed resulting from the use of this product.</p>
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SAFETY DATA SHEET

according to Hazardous Products Regulations (HPR)

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Wash Buffer Concentrate, 25X

Revision 6
Revision date 2023-11-20

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Wash Buffer Concentrate, 25X
Product code	8428, 24218, 24269, 700002567, 400000123, 400000128

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC21] Laboratory chemicals;
Description	Intended for use in routine analytics, including quality control and monitoring. Do not use components from one kit with any other kit.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshler Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone 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

2.1.2. Classification - GHS	Based on available data, this product is not classified as hazardous.
-----------------------------	---

2.2. Label elements

Hazard Statement	No Significant Hazard
------------------	-----------------------

2.3. Other hazards

Other hazards	Contains material(s) which may damage fertility or the unborn child. Contains substance(s) which are hazardous to the environment.
---------------	--

SECTION 3: Composition/information on ingredients

Description

	Concentrations listed are not product specifications.
--	---

Particle Characteristics

	Not applicable.
--	-----------------

Further information

Wash Buffer Concentrate, 25X

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Further information

Full text of Hazard Statements listed in this Section is provided in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Inhalation	May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.
Skin contact	May cause irritation to skin.
Ingestion	Ingestion may cause nausea and vomiting.

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

Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use extinguishing media appropriate to the surrounding fire conditions.

5.2. Special hazards arising from the substance or mixture

Contains substance(s) which are hazardous to the environment. Do not allow undiluted product to be released to ground water, water course or sewage system.

5.3. Advice for firefighters

Do not breathe vapour or spray mist. Wear suitable respiratory equipment when necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.

6.2. Environmental precautions

Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.

6.3. Methods and material for containment and cleaning up

Absorb spillage to prevent material damage. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

6.4. Reference to other sections

See Section(s) 2, 8, and 13 for further information.

SECTION 7: Handling and storage

Wash Buffer Concentrate, 25X

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7.1. Precautions for safe handling

	Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing. Read the entire label and follow all use directions, restrictions, and precautions.
--	--

7.2. Conditions for safe storage, including any incompatibilities

	Store at temperatures between 2 °C and 8 °C. Follow label instructions. Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal.
--	---

7.3. Specific end use(s)

	See Section(s) 1.2 for further information.
--	---

Further information


	Refer to product label and/or package insert for additional information. Follow label instructions.
--	---

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

	No occupational exposure limits known.
--	--

8.2. Exposure controls

	
8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Use as appropriate: Suitable eye protection.
Skin protection - Handprotection	Use as appropriate: Chemical-resistant gloves made of any waterproof material.
Skin protection - Other	Use as appropriate: Protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure controls	Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

Further information

	Remove and wash contaminated clothing before reuse.
--	---

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Wash Buffer Concentrate, 25X

Revision 6
Revision date 2023-11-20

9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Clear/Colourless
Odour	Odourless/Slight
Odour threshold	No data available
pH	No data available
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapour pressure	No data available
Relative Vapour Density	No data available
Density / Relative Density	No data available
Fat Solubility	No data available
Partition coefficient (P)	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive	Not applicable.
Oxidising	No data available
Solubility	Soluble in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
--	---------------------------------

10.2. Chemical stability

	Stable under normal conditions.
--	---------------------------------

10.3. Possibility of hazardous reactions

	Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.
--	---

10.4. Conditions to avoid

	Keep away from extreme temperatures.
--	--------------------------------------

10.5. Incompatible materials

	No data available.
--	--------------------

10.6. Hazardous decomposition products

	Carbon oxides.
--	----------------

SECTION 11: Toxicological information

Wash Buffer Concentrate, 25X

Revision 6
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11.1 Information on hazard classes

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No components at >0,01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Listed by the International Agency for Research on Cancer (IARC) as a Group 2 substance: suspected of being a human carcinogen, [Thimerosal (mercury compounds), CAS No. 54-64-8 (<0.05%)]. No components at >0,01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	Contains material(s) which may damage fertility or the unborn child.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.
11.1.2. Mixtures	
	See Section(s) 3 for further information.
11.1.3. Hazard Information	
	See Section(s) 2 and 3 for further information.
11.1.4. Toxicological Information	
	No data available
11.1.5. Hazard Class	
	See Section(s) 2 and 14 for further information.
11.1.6. Classification Criteria	
	Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.
11.1.7. Information on likely routes of exposure	
	Eye contact. Skin contact. Ingestion. Inhalation.
11.1.8. Symptoms related to the physical, chemical and toxicological characteristics	
	See Section(s) 4.2 for further information.
11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure	
	See Section(s) 4.2 for further information.
11.1.10. Interactive effects	
	No data available.
11.1.11. Absence of specific data	
	<1% of this mixture consists of ingredients of unknown acute toxicity.
11.1.12. Mixture versus substance information	
	See Section(s) 3 for further information.

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11.1.13. Other information

No data available.

11.2 Information on other hazards

No data available.

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6 Endocrine disrupting properties

No data is available on this product.

12.7 Other adverse effects

Contains substance(s) which are hazardous to the environment. Specific test data for the mixture is not available.

Further information

Keep out of lakes, ponds, or streams. Do not let product contaminate subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in compliance with all local and national regulations. Follow label instructions.

Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.
If empty: Do not reuse this container. Place in trash or offer for recycling, if available.
If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.**SECTION 14: Transport information**

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

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14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

14.7 Maritime Transport in bulk according to IMO instruments

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations	WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR).
	Contact SDS@neogen.com for additional information. Please specify country or region with your request.
	California residents please note WARNING: This product can expose you to chemicals, including Thimerosal (mercury compounds), CAS No. 54-64-8 (<0.05%), which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov .

SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas: 7 - 7.2. Conditions for safe storage, including any incompatibilities. 9 - 9.1. Information on basic physical and chemical properties (Fat Solubility).
Acronyms	ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR). CAS No.: Chemical Abstracts Service. CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia). FIFRA: U.S. Federal Insecticide, Fungicide, and Rodenticide Act. GHS: Globally Harmonized System. HCS 2012: U.S. Hazard Communication Standard (2012 revision). IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation. IMDG: International Maritime Dangerous Goods. LD: Lethal dose. OEL: Occupational exposure limit. OSHA: U.S. Occupational Safety and Health Administration. PEL: Permissible Exposure Limit. REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals. STOT: Specific Target Organ Toxicity. SVHC: Substance of very high concern. US DOT: United States Department of Transportation. VOC: Volatile Organic Compound. WEL: Workplace Exposure Limit.

Further information

DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect

Wash Buffer Concentrate, 25X

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Further information

the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.

Except as expressly stated herein, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, USAGE OF TRADE, OR RESULTS TO BE OBTAINED BY USE OF THIS PRODUCT are made with respect to this product or use of this product. The product covered is furnished "as is" and only subject to the warranties herein provided, no liability is assumed resulting from the use of this product.

SAFETY DATA SHEET

according to Hazardous Products Regulations (HPR)

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Extraction Additive (VIP)

Revision 4
Revision date 2023-11-20

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Extraction Additive (VIP)
CAS No.	9003-39-8
EC No.	618-363-4
Product code	22198, 400000103

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC21] Laboratory chemicals;
Description	Intended for use in routine analytics, including quality control and monitoring. Do not use components from one kit with any other kit.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshler Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone 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

2.1.2. Classification - GHS	Based on available data, this product is not classified as hazardous.
-----------------------------	---

2.2. Label elements

Hazard Statement	No Significant Hazard
------------------	-----------------------

2.3. Other hazards

Other hazards	Contains material(s) which may. Dust may be irritating if inhaled.
---------------	--

SECTION 3: Composition/information on ingredients

Description

No components need to be disclosed according to the applicable regulations.
Concentrations listed are not product specifications.

Particle Characteristics

Extraction Additive (VIP)

Revision 4
Revision date 2023-11-20

Particle Characteristics

	No data available.
--	--------------------

Further information

	Full text of Hazard Statements listed in this Section is provided in Section 16.
--	--

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist.
Ingestion	Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Inhalation	May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.
Skin contact	May cause irritation to skin.
Ingestion	Ingestion may cause nausea and vomiting.

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

	Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand.
--	--

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use extinguishing media appropriate to the surrounding fire conditions.
--	---

5.2. Special hazards arising from the substance or mixture

	Avoid formation of dust. Do not allow undiluted product to be released to ground water, water course or sewage system.
--	--

5.3. Advice for firefighters

	Do not breathe dust or vapour. Wear self-contained breathing apparatus and chemical-protective clothing.
--	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Avoid formation of dust. Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure.
--	--

6.2. Environmental precautions

	Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.
--	---

6.3. Methods and material for containment and cleaning up

	Avoid formation of dust. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes.
--	--

6.4. Reference to other sections

Extraction Additive (VIP)

Revision 4
Revision date 2023-11-20

6.4. Reference to other sections

See Section(s) 2, 8, and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing.
Read the entire label and follow all use directions, restrictions, and precautions.

7.2. Conditions for safe storage, including any incompatibilities

Store at temperatures between 2 °C and 30 °C. Follow label instructions.
Store in correctly labelled containers. Keep container tightly closed. Protect from moisture. Do not contaminate water, food, or feed by storage or disposal.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

Further information

Refer to product label and/or package insert for additional information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limits known.

8.2. Exposure controls



8.2.1. Appropriate engineering controls

Ensure adequate ventilation of the working area.

8.2.2. Individual protection measures

Use as appropriate: Protective equipment.

Eye / face protection

Use as appropriate: Suitable eye protection.

Skin protection - Handprotection

Use as appropriate: Chemical-resistant gloves made of any waterproof material. Wash the outside of gloves before removing them.

Skin protection - Other

Use as appropriate: Protective clothing. Wash contaminated clothing, separately from other laundry, with detergent and water before reuse.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Dust may be irritating if inhaled.

Occupational exposure controls

Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station.

Further information

Refer to product label for additional PPE requirements and recommendations. Follow label instructions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Extraction Additive (VIP)

Revision 4
Revision date 2023-11-20

9.1. Information on basic physical and chemical properties

State	Powder
Colour	Beige
Odour	Odourless/Slight
Odour threshold	No data available
pH	5 - 8
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	No data available
Vapour pressure	No data available
Relative Vapour Density	No data available
Density / Relative Density	No data available
Fat Solubility	No data available
Partition coefficient (P)	No data available
Autoignition temperature	No data available
Viscosity	Not applicable.
Explosive	No data available
Oxidising	No data available
Solubility	Soluble in water

9.2. Other information

Conductivity	No data available
Surface tension	Not applicable.
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
--	---------------------------------

10.2. Chemical stability

	Stable under normal conditions.
--	---------------------------------

10.3. Possibility of hazardous reactions

	Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.
--	---

10.4. Conditions to avoid

	Keep away from extreme temperatures. Protect from moisture.
--	---

10.5. Incompatible materials

	No data available.
--	--------------------

10.6. Hazardous decomposition products

	Carbon oxides.
--	----------------

SECTION 11: Toxicological information

Extraction Additive (VIP)

Revision 4
Revision date 2023-11-20

11.1 Information on hazard classes

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No components at >0,01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Listed by the International Agency for Research on Cancer (IARC) as a group 3 substance: evidence does not support the substance as a human carcinogen, [Polyvinyl pyrrolidone, CAS No. 9003-39-8]. No components at >0,01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

	See Section(s) 3 for further information.
--	---

11.1.3. Hazard Information

	See Section(s) 2 and 3 for further information.
--	---

11.1.4. Toxicological Information

	No data available
--	-------------------

11.1.5. Hazard Class

	See Section(s) 2 and 14 for further information.
--	--

11.1.6. Classification Criteria

	Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.
--	--

11.1.7. Information on likely routes of exposure

	Eye contact. Skin contact. Inhalation. Ingestion.
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11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

	See Section(s) 4.2 for further information.
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11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

	See Section(s) 4.2 for further information.
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11.1.10. Interactive effects

	No data available.
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11.1.11. Absence of specific data

	<1% of this mixture consists of ingredients of unknown acute toxicity.
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11.1.12. Mixture versus substance information

	See Section(s) 3 for further information.
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11.1.13. Other information

No data available.

11.2 Information on other hazards

No data available.

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6 Endocrine disrupting properties

No data is available on this product.

12.7 Other adverse effects

Specific test data for the substance or mixture is not available.

Further information

Keep out of lakes, ponds, or streams.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in compliance with all local and national regulations. Follow label instructions.

Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.

If empty: Do not reuse this container. Place in trash or offer for recycling, if available.

If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

Further information

Refer to product label and/or package insert for additional information. Follow label instructions.

SECTION 14: Transport information

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

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14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

14.7 Maritime Transport in bulk according to IMO instruments

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations	WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR).
	Contact SDS@neogen.com for additional information. Please specify country or region with your request.
	California Proposition 65: This product does not contain reportable substances at >0,0001% concentration.

SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas:. 1 - Description. 7 - 7.2. Conditions for safe storage, including any incompatibilities. 9 - 9.1. Information on basic physical and chemical properties (Fat Solubility). 9 - 9.2. Other information (Gas group). 11 - Carcinogenicity.
Acronyms	ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR). CAS No.: Chemical Abstracts Service. CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia). FIFRA: U.S. Federal Insecticide, Fungicide, and Rodenticide Act. GHS: Globally Harmonized System. HCS 2012: U.S. Hazard Communication Standard (2012 revision). IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation. IMDG: International Maritime Dangerous Goods. LD: Lethal dose. OEL: Occupational exposure limit. OSHA: U.S. Occupational Safety and Health Administration. PEL: Permissible Exposure Limit. REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals. STOT: Specific Target Organ Toxicity. SVHC: Substance of very high concern. US DOT: United States Department of Transportation. VOC: Volatile Organic Compound. WEL: Workplace Exposure Limit.

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Further information

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