



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). If a component does not have a Safety Data Sheet included, the item falls under Hazard Communication [1910.1200(b)(6)], *Articles*, and does not require a Safety Data Sheet.

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 29 CFR 1910.1200 and GHS

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Gliadin R5 Multi-Level Controls

Revision 1
Revision date 2019-10-03

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

1.1. Product identifier

Product name	Gliadin R5 Multi-Level Controls
Product code	(8510, 8511)

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals;
Description	Intended for laboratory use only.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshner 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

2.2. Label elements

Hazard Statements	No Significant Hazard
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2.3. Other hazards

Other hazards	None known.
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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 Registration Number	Conc. (%w/w)	Classification
Glycerin (Glycerin mist)		56-81-5	200-289-5		1 - 10%	
Sodium hydroxide	011-002-00-6	1310-73-2	215-185-5		0 - 0.5%	Skin Corr. 1A: H314;

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

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 dizziness and headache. 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.
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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

	This product is not flammable.
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5.3. Advice for firefighters

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

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. Read the entire label and follow all use directions, restrictions, and precautions. Use as appropriate: Protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.


SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limit Values

Glycerin (Glycerin mist)	<p>ACGIH TLV TWA: 10 mg/m³</p> <p>Notations: -</p> <p>OSHA PEL 8hr TWA mg m3: 15</p> <p>NIOSH REL 10hr TWA ppm:</p> <p>NIOSH REL 15 min ST ppm:</p>	<p>ACGIH TLV STEL: -</p> <p>OSHA PEL 8hr TWA ppm: -</p> <p>Skin Designation: -</p> <p>NIOSH REL 10hr TWA mg m3:</p> <p>NIOSH REL 15 min ST mg m3:</p>
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8.2. Exposure controls

	
Appropriate engineering controls	Ensure adequate ventilation of the working area.
Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Use as appropriate: Suitable eye protection.
Skin protection - Hand protection	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.

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
Color	Clear/Colorless
Odor	Odorless/Slight
Odor threshold	No data available
pH	No data available
Melting point	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	Not applicable.
Oxidizing properties	No data available
Solubility	Soluble in water

9.2. Other information

VOC (Volatile organic compounds)	No data available
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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

11.1. Information on toxicological effects

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.
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11.1. Information on toxicological effects

Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitization	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-123. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	No Significant Hazard.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects.

11.1.2. Mixtures

	See Section(s) 3 for further information.
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11.1.3. Hazard Information

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

Gliadin R5 Multi-Level Controls	Oral Rat LD50: 13333
Glycerin	Inhalation Rat LC50/1 h: 2570 mgm3 Oral Rat LD50: >12600 mg/kg

11.1.5. Hazard Class

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

	Based on the Globally Harmonized System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.
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11.1.7. Information on likely routes of exposure

	Eye contact. Ingestion. Skin contact.
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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

Caution - substance not yet fully tested.

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.

Partition coefficient

Gliadin R5 Multi-Level Controls No data available

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. Other adverse effects

Caution - substance not yet fully tested.

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.

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

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	<p>Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.</p>
Chemical Inventories/Right-to-Know Lists:	<p>--International--</p> <p>Basel Convention (Hazardous Waste): Not applicable.</p> <p>Chemical Weapons Convention (OPCW): This material contains no reportable components.</p> <p>Kyoto Protocol Greenhouse Gases: This material contains no reportable components.</p> <p>Mercosur Agreement: Applicable.</p> <p>Montreal Protocol: This material contains no reportable components.</p> <p>The Rotterdam Convention: This material contains no reportable components.</p> <p>The Stockholm Convention: This material contains no reportable components.</p> <p>--Asia and the ASEAN Nations--</p> <p>Catalog of Hazardous Chemicals (China): This material contains no reportable components.</p> <p>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 material contains no reportable components.</p> <p>Chemical Substances Control Law (Japan): This material contains no reportable components.</p> <p>Industrial Safety and Health Act, Dangerous Substances (Japan): This material contains no reportable components.</p> <p>Poisonous and Deleterious Substances Act (Japan): This material contains no reportable components.</p> <p>Chemical Substances Subject to Permission (Korea): This material contains no reportable components.</p> <p>Restricted or Prohibited Substances (Korea): This material contains no reportable components.</p> <p>Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This material contains no reportable components.</p> <p>Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients listed or exempt.</p> <p>Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This material contains no reportable components.</p> <p>Hazardous Substances Act (Thailand): This material contains no reportable components.</p> <p>Law on Chemicals (Vietnam): This material contains no reportable components.</p> <p>--Australia and New Zealand--</p> <p>Australian Dangerous Goods Code: Not applicable.</p> <p>Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt.</p> <p>New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.</p> <p>--European Union (EU) and the United Kingdom (UK)--</p> <p>Authorization List (Annex XIV of REACH): All ingredients listed or exempt.</p> <p>Annex XVII for REACH: This material contains no reportable components.</p>

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

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

--North America--.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.

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

Massachusetts Right-to-Know Hazardous Substance List: This material contains no reportable components.

New Jersey Worker and Community Right to Know Act: This material contains no reportable components.

Pennsylvania Right to Know Law: This material contains no reportable components.

Rhode Island Right-to-Know General Law: This material contains no reportable components.

California Prop 65: This material contains no reportable components.

Inventories

Ingredient	TSCA	MA	SARA313	CALPROP65	CWA307	CAA112	CWA311	SARA302	SARA304
Glycerin (1,2,3-Propanetriol)	Y	N	N	N	N	N	N	N	N

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. 1 - Product Use. 9 - 9.1. Information on basic physical and chemical properties (Explosive properties). 9 - 9.1. Information on basic physical and chemical properties (Solubility). 11 - Acute toxicity. 11 - Repeated or prolonged exposure. 11 - STOT-single exposure. 15 - Chemical Inventories/Right-to-Know Lists:.
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>GHS: Globally Harmonized System.</p> <p>HCS 2012: Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organization.</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, Authorization, and Restriction of Chemicals.</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>Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.</p> <p>Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.</p> <p>Skin Irrit. 2: H315 - Causes skin irritation.</p> <p>Eye Irrit. 2: H319 - Causes serious eye irritation.</p>

Further information

Gliadin R5 Multi-Level Controls

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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, EXPRESSED 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 29 CFR 1910.1200 and GHS

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Gliadin R5-HRP Conjugate

Revision 1
Revision date 2019-10-03

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

1.1. Product identifier

Product name	Gliadin R5-HRP Conjugate
Product code	(8510, 8511)

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals;
Description	Intended for laboratory use only.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshner 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

2.2. Label elements

Hazard Statements	No Significant Hazard
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2.3. Other hazards

Other hazards	None known.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Gliadin R5-HRP Conjugate

Revision 1
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3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Sodium periodate		7790-28-5	232-197-6		0 - 0.005%	Ox. Sol. 1: H271; Skin Corr. 1C: H314; Eye Dam. 1: H318; STOT RE 1: H372; Aquatic Acute 1: H400;
Sodium borohydride		16940-66-2	241-004-4			Water-react. 1: H260; Acute Tox. 3: H301; Skin Corr. 1B: H314; Eye Dam. 1: H318; Repr. 1B: H360;
Acetic acid ...% (Acetic acid)	607-002-00-6	64-19-7	200-580-7			Flam. Liq. 3: H226; Skin Corr. 1A: H314;
Sodium azide (as Hydrazoic acid vapor)	011-004-00-7	26628-22-8	247-852-1			Acute Tox. 2: H300; Aquatic Acute 1: H400; Aquatic Chronic 1: H410;

Description

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

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 dizziness and headache. 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

This product is not flammable.

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5.3. Advice for firefighters

Do not breathe vapor 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

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. Read the entire label and follow all use directions, restrictions, and precautions. Use as appropriate: Protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls



Appropriate engineering controls

Ensure adequate ventilation of the working area.

Individual protection measures

Use as appropriate: Protective equipment.

Eye / face protection

Use as appropriate: Suitable eye protection.

Skin protection - Hand protection

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

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8.2. Exposure controls

station.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State	Liquid
Color	Clear/Brown
Odor	Odorless/Slight
Odor threshold	No data available
pH	No data available
Melting point	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	Not applicable.
Oxidizing properties	No data available
Solubility	Soluble in water

9.2. Other information

VOC (Volatile organic compounds)	No data available
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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

Gliadin R5-HRP Conjugate

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11.1. Information on toxicological effects

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 sensitization	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-123. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	No Significant Hazard.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects.
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 Harmonized 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. Ingestion. Skin contact.
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.

Gliadin R5-HRP Conjugate

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Revision date 2019-10-03

11.1.13. Other information

Caution - substance not yet fully tested.

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.

Partition coefficient

Gliadin R5-HRP Conjugate No data available

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. Other adverse effects

Caution - substance not yet fully tested.

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.

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

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	Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.
Chemical Inventories/Right-to-Know Lists:	<p>--International--</p> <p>Basel Convention (Hazardous Waste): Not applicable.</p> <p>Chemical Weapons Convention (OPCW): This material contains no reportable components.</p> <p>Kyoto Protocol Greenhouse Gases: This material contains no reportable components.</p> <p>Mercosur Agreement: Applicable.</p> <p>Montreal Protocol: This material contains no reportable components.</p> <p>The Rotterdam Convention: This material contains no reportable components.</p> <p>The Stockholm Convention: This material contains no reportable components.</p> <p>--Asia and the ASEAN Nations--</p> <p>Catalog of Hazardous Chemicals (China): This material contains no reportable components.</p> <p>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 material contains no reportable components.</p> <p>Chemical Substances Control Law (Japan): This material contains no reportable components.</p> <p>Industrial Safety and Health Act, Dangerous Substances (Japan): This material contains no reportable components.</p> <p>Poisonous and Deleterious Substances Act (Japan): This material contains no reportable components.</p> <p>Chemical Substances Subject to Permission (Korea): This material contains no reportable components.</p> <p>Restricted or Prohibited Substances (Korea): This material contains no reportable components.</p> <p>Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This material contains no reportable components.</p> <p>Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients listed or exempt.</p> <p>Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This material contains no reportable components.</p> <p>Hazardous Substances Act (Thailand): This material contains no reportable components.</p> <p>Law on Chemicals (Vietnam): This material contains no reportable components.</p> <p>--Australia and New Zealand--</p> <p>Australian Dangerous Goods Code: Not applicable.</p> <p>Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt.</p> <p>New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.</p> <p>--European Union (EU) and the United Kingdom (UK)--</p> <p>Authorization List (Annex XIV of REACH): All ingredients listed or exempt.</p> <p>Annex XVII for REACH: This material contains no reportable components.</p>

Gliadin R5-HRP Conjugate

Revision 1
Revision date 2019-10-03

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

	<p>Article 95 of the Biocidal Products Regulation (BPR): Not applicable.</p> <p>--North America--.</p> <p>Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.</p> <p>Toxic Substances Control Act (TSCA): All ingredients listed or exempt.</p> <p>Massachusetts Right-to-Know Hazardous Substance List: This material contains no reportable components.</p> <p>New Jersey Worker and Community Right to Know Act: This material contains no reportable components.</p> <p>Pennsylvania Right to Know Law: This material contains no reportable components.</p> <p>Rhode Island Right-to-Know General Law: This material contains no reportable components.</p> <p>California Prop 65: This material contains no reportable components.</p>
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SECTION 16: Other information

Other information

Revision	<p>This document differs from the previous version in the following areas:.</p> <p>1 - Description.</p> <p>1 - Product Use.</p> <p>9 - 9.1. Information on basic physical and chemical properties (Explosive properties).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Solubility).</p> <p>11 - Acute toxicity.</p> <p>11 - Repeated or prolonged exposure.</p> <p>12 - 12.1. Toxicity.</p> <p>15 - Chemical Inventories/Right-to-Know Lists:.</p>
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>GHS: Globally Harmonized System.</p> <p>HCS 2012: Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organization.</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, Authorization, and Restriction of Chemicals.</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>Ox. Sol. 1: H271 - May cause fire or explosion; strong oxidiser.</p> <p>Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.</p> <p>Eye Dam. 1: H318 - Causes serious eye damage.</p> <p>STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure .</p> <p>Aquatic Acute 1: H400 - Very toxic to aquatic life.</p> <p>Water-react. 1: H260 - In contact with water releases flammable gases which may ignite spontaneously.</p> <p>Acute Tox. 3: H301 - Toxic if swallowed.</p> <p>Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.</p> <p>Repr. 1B: H360 - May damage fertility or the unborn child .</p>

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Other information

Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.
EUH032 - Contact with acids liberates very toxic gas.
Acute Tox. 2: H300 - Fatal if swallowed.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.

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.

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SAFETY DATA SHEET

according to 29 CFR 1910.1200 and GHS

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Extraction Additive

Revision 1
Revision date 2019-10-03

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

1.1. Product identifier

Product name	Extraction Additive
CAS No.	68514-61-4
Product code	22178, 22179, 22192, 22195

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals;
Description	Intended for laboratory use only.

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

2.2. Label elements

Hazard Statements	No Significant Hazard
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SECTION 3: Composition/information on ingredients

Description

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

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,
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4.1. Description of first aid measures

Eye contact	provide artificial respiration. Seek medical attention if irritation or symptoms persist. 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 dizziness and headache. 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

	This product is not flammable.
--	--------------------------------

5.3. Advice for firefighters

	Do not breathe dust or vapor. Wear suitable respiratory equipment when necessary.
--	---

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

	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
--	--

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Revision date 2019-10-03

7.1. Precautions for safe handling

	disposal of wastes. Read the entire label and follow all use directions, restrictions, and precautions. Use as appropriate: Protective clothing.
--	--

7.2. Conditions for safe storage, including any incompatibilities


	Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.
--	---

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls

	
Appropriate engineering controls	Ensure adequate ventilation of the working area.
Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Use as appropriate: Suitable eye protection.
Skin protection - Hand protection	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.

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	Powder
Color	White/Off white
Odor	Mild
Odor threshold	No data available
pH	No data available
Melting point	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	Not applicable.
Explosive properties	Not applicable.
Oxidizing properties	No data available
Solubility	Soluble in water

9.2. Other information

VOC (Volatile organic compounds)	Not applicable.
---	-----------------

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, Moisture.
--	--

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	May cause irritation to skin.

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Revision date 2019-10-03

11.1. Information on toxicological effects

Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitization	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-123. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. 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.

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

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

11.1.5. Hazard Class

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

11.1.6. Classification Criteria

	Based on the Globally Harmonized 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. Ingestion. Inhalation. Skin contact.
--	---

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

	Caution - substance not yet fully tested.
--	---

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Revision date 2019-10-03

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.

Partition coefficient

Extraction Additive No data available

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. Other adverse effects

Caution - substance not yet fully tested.

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.

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14.6. Special precautions for user

The product is not classified as dangerous for carriage.

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

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	Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.
Chemical Inventories/Right-to-Know Lists:	<p>--International--.</p> <p>Basel Convention (Hazardous Waste): Not applicable.</p> <p>Chemical Weapons Convention (OPCW): This material contains no reportable components.</p> <p>Kyoto Protocol Greenhouse Gases: This material contains no reportable components.</p> <p>Mercosur Agreement: Applicable.</p> <p>Montreal Protocol: This material contains no reportable components.</p> <p>The Rotterdam Convention: This material contains no reportable components.</p> <p>The Stockholm Convention: This material contains no reportable components.</p> <p>--Asia and the ASEAN Nations--.</p> <p>Catalog of Hazardous Chemicals (China): This material contains no reportable components.</p> <p>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 material contains no reportable components.</p> <p>Chemical Substances Control Law (Japan): This material contains no reportable components.</p> <p>Industrial Safety and Health Act, Dangerous Substances (Japan): This material contains no reportable components.</p> <p>Poisonous and Deleterious Substances Act (Japan): This material contains no reportable components.</p> <p>Chemical Substances Subject to Permission (Korea): This material contains no reportable components.</p> <p>Restricted or Prohibited Substances (Korea): This material contains no reportable components.</p> <p>Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This material contains no reportable components.</p> <p>Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients listed or exempt.</p> <p>Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This material contains no reportable components.</p> <p>Hazardous Substances Act (Thailand): This material contains no reportable components.</p> <p>Law on Chemicals (Vietnam): This material contains no reportable components.</p> <p>--Australia and New Zealand--.</p> <p>Australian Dangerous Goods Code: Not applicable.</p> <p>Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt.</p> <p>New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.</p> <p>--European Union (EU) and the United Kingdom (UK)--.</p> <p>Authorization List (Annex XIV of REACH): All ingredients listed or exempt.</p> <p>Annex XVII for REACH: This material contains no reportable components.</p> <p>Article 95 of the Biocidal Products Regulation (BPR): Not applicable.</p> <p>--North America--.</p>

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Revision date 2019-10-03

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

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.
Toxic Substances Control Act (TSCA): All ingredients listed or exempt.
Massachusetts Right-to-Know Hazardous Substance List: This material contains no reportable components.
New Jersey Worker and Community Right to Know Act: This material contains no reportable components.
Pennsylvania Right to Know Law: This material contains no reportable components.
Rhode Island Right-to-Know General Law: This material contains no reportable components.

California Prop 65: This material contains no reportable components.

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. 1 - Product Use. 2 - Other hazards. 9 - 9.1. Information on basic physical and chemical properties (Explosive properties). 9 - 9.1. Information on basic physical and chemical properties (Viscosity). 15 - Chemical Inventories/Right-to-Know Lists:.
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. GHS: Globally Harmonized System. HCS 2012: Hazard Communication Standard (2012 revision). IATA: International Air Transport Association. ICAO: International Civil Aviation Organization. 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, Authorization, and Restriction of Chemicals. SVHC: Substance of very high concern. US DOT: United States Department of Transportation. VOC: Volatile Organic Compound. WEL: Workplace Exposure Limit.</p>

Further information

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Extraction Additive

Revision 1
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Further information

	resulting from the use of this product.
--	---



SAFETY DATA SHEET

according to 29 CFR 1910.1200 and GHS

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Wash Solution Concentrate

Revision 3
Revision date 2019-10-03

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

1.1. Product identifier

Product name	Wash Solution Concentrate
Product code	24269

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals;
Description	Intended for laboratory use only.

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

2.2. Label elements

Hazard Statements	No Significant Hazard
-------------------	-----------------------

2.3. Other hazards

Other hazards	None known.
---------------	-------------

SECTION 3: Composition/information on ingredients

Description

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

Further information

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

SECTION 4: First aid measures

Wash Solution Concentrate

Revision 3
Revision date 2019-10-03

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 dizziness and headache. 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

	This product is not flammable.
--	--------------------------------

5.3. Advice for firefighters

	Do not breathe vapor 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

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
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7.1. Precautions for safe handling

	adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Read the entire label and follow all use directions, restrictions, and precautions. Use as appropriate: Protective clothing.
--	---

7.2. Conditions for safe storage, including any incompatibilities


	Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.
--	---

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls

	
Appropriate engineering controls	Ensure adequate ventilation of the working area.
Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Use as appropriate: Suitable eye protection.
Skin protection - Hand protection	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.

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
Color	Clear
Odor	Odorless/Slight
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	Not applicable.
Oxidizing properties	No data available
Odor threshold	No data available
pH	No data available
Melting point	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Solubility	Soluble in water

9.2. Other information

VOC (Volatile organic compounds)	Not applicable.
---	-----------------

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 toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	May cause irritation to skin.

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11.1. Information on toxicological effects

Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitization	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	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]. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	No Significant Hazard.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure.

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 Harmonized 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. Ingestion. Skin contact.
--	---------------------------------------

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

	Caution - substance not yet fully tested.
--	---

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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.

Partition coefficient

Wash Solution Concentrate No data available

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. Other adverse effects

Caution - substance not yet fully tested.

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.

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14.6. Special precautions for user

The product is not classified as dangerous for carriage.

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

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	Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.
Chemical Inventories/Right-to-Know Lists:	<p>--International--.</p> <p>Basel Convention (Hazardous Waste): Not applicable.</p> <p>Chemical Weapons Convention (OPCW): This material contains no reportable components.</p> <p>Kyoto Protocol Greenhouse Gases: This material contains no reportable components.</p> <p>Mercosur Agreement: Applicable.</p> <p>Montreal Protocol: This material contains no reportable components.</p> <p>The Rotterdam Convention: Annex III [Thimerosal (mercury compounds), CAS No. 54-64-8].</p> <p>The Stockholm Convention: This material contains no reportable components.</p> <p>--Asia and the ASEAN Nations--.</p> <p>Catalog of Hazardous Chemicals (China): No. 2581 [Thimerosal (mercury compounds), CAS No. 54-64-8].</p> <p>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 material contains no reportable components.</p> <p>Chemical Substances Control Law (Japan): Class I environmental release [Thimerosal (mercury compounds), CAS No. 54-64-8].</p> <p>Industrial Safety and Health Act, Dangerous Substances (Japan): This material contains no reportable components.</p> <p>Poisonous and Deleterious Substances Act (Japan): Deleterious [Thimerosal (mercury compounds), CAS No. 54-64-8].</p> <p>Chemical Substances Subject to Permission (Korea): This material contains no reportable components.</p> <p>Restricted or Prohibited Substances (Korea): This material contains no reportable components.</p> <p>Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This material contains no reportable components.</p> <p>Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients listed or exempt.</p> <p>Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This material contains no reportable components.</p> <p>Hazardous Substances Act (Thailand): This material contains no reportable components.</p> <p>Law on Chemicals (Vietnam): This material contains no reportable components.</p> <p>--Australia and New Zealand--.</p> <p>Australian Dangerous Goods Code: Not applicable.</p> <p>Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt.</p> <p>New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.</p> <p>--European Union (EU) and the United Kingdom (UK)--.</p> <p>Authorization List (Annex XIV of REACH): All ingredients listed or exempt.</p> <p>Annex XVII for REACH: This material contains no reportable components.</p> <p>Article 95 of the Biocidal Products Regulation (BPR): Not applicable.</p>

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

--North America--.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.

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

Massachusetts Right-to-Know Hazardous Substance List: This material contains no reportable components.

New Jersey Worker and Community Right to Know Act: This material contains no reportable components.

Pennsylvania Right to Know Law: This material contains no reportable components.

Rhode Island Right-to-Know General Law: This material contains no reportable components.

****California residents please note**.**

WARNING: This product can expose you to chemicals, including Thimerosal (mercury compounds), CAS No. 54-64-8, 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:. 11 - Carcinogenicity. 15 - Chemical Inventories/Right-to-Know Lists:.
Acronyms	ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR). CAS No.: Chemical Abstracts Service. GHS: Globally Harmonized System. HCS 2012: Hazard Communication Standard (2012 revision). IATA: International Air Transport Association. ICAO: International Civil Aviation Organization. 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, Authorization, and Restriction of Chemicals. 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 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, EXPRESSED 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

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Further information

	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 29 CFR 1910.1200 and GHS

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Phosphate Buffered Saline, Foil Pouch

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

1.1. Product identifier

Product name	Phosphate Buffered Saline, Foil Pouch
Product code	0114

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals;
Description	Intended for laboratory use only.

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)
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SECTION 2: Hazards identification

2.2. Label elements

Hazard Statements	No Significant Hazard
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2.3. Other hazards

Other hazards	None known.
---------------	-------------

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Potassium chloride		7447-40-7	231-211-8		1 - 10%	Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335;

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Description

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

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 dizziness and headache. 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

This product is not flammable.

5.3. Advice for firefighters

Do not breathe dust or vapor. Wear suitable respiratory equipment when necessary.

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.

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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. Read the entire label and follow all use directions, restrictions, and precautions. Use as appropriate: Protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls



Appropriate engineering controls

Ensure adequate ventilation of the working area.

Individual protection measures

Use as appropriate: Protective equipment.

Eye / face protection

Use as appropriate: Suitable eye protection.

Skin protection - Hand protection

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.

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	Powder
Color	White
Odor	Odorless/Slight
Odor threshold	No data available
pH	7.4
Melting point	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	Not applicable.
Explosive properties	Not applicable.
Oxidizing properties	No data available
Solubility	Soluble in water

9.2. Other information

VOC (Volatile organic compounds)	No data available
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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, Moisture.
--	--

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

	Carbon oxides.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

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.
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11.1. Information on toxicological effects

Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitization	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-123. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. 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	Component(s) may cause damage to human organs based on animal data.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure.

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 Harmonized 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. Ingestion. Inhalation. Skin contact.
--	---

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

--	--

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11.1.13. Other information

Caution - substance not yet fully tested.

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.

Partition coefficient

Phosphate Buffered Saline, Foil Pouch No data available

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. Other adverse effects

Caution - substance not yet fully tested.

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.

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

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	Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.
Chemical Inventories/Right-to-Know Lists:	<p>--International--</p> <p>Basel Convention (Hazardous Waste): Not applicable. Chemical Weapons Convention (OPCW): This material contains no reportable components. Kyoto Protocol Greenhouse Gases: This material contains no reportable components. Mercosur Agreement: Applicable. Montreal Protocol: This material contains no reportable components. The Rotterdam Convention: This material contains no reportable components. The Stockholm Convention: This material contains no reportable components.</p> <p>--Asia and the ASEAN Nations--</p> <p>Catalog of Hazardous Chemicals (China): This material contains no reportable components. 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 material contains no reportable components. Chemical Substances Control Law (Japan): This material contains no reportable components. Industrial Safety and Health Act, Dangerous Substances (Japan): This material contains no reportable components. Poisonous and Deleterious Substances Act (Japan): This material contains no reportable components. Chemical Substances Subject to Permission (Korea): This material contains no reportable components. Restricted or Prohibited Substances (Korea): This material contains no reportable components. Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This material contains no reportable components. Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients listed or exempt. Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This material contains no reportable components. Hazardous Substances Act (Thailand): This material contains no reportable components. Law on Chemicals (Vietnam): This material contains no reportable components.</p> <p>--Australia and New Zealand--</p> <p>Australian Dangerous Goods Code: Not applicable. Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt. New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.</p> <p>--European Union (EU) and the United Kingdom (UK)--</p> <p>Authorization List (Annex XIV of REACH): All ingredients listed or exempt. Annex XVII for REACH: This material contains no reportable components.</p>

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

	<p>Article 95 of the Biocidal Products Regulation (BPR): Not applicable.</p> <p>--North America--.</p> <p>Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.</p> <p>Toxic Substances Control Act (TSCA): All ingredients listed or exempt.</p> <p>Massachusetts Right-to-Know Hazardous Substance List: This material contains no reportable components.</p> <p>New Jersey Worker and Community Right to Know Act: This material contains no reportable components.</p> <p>Pennsylvania Right to Know Law: This material contains no reportable components.</p> <p>Rhode Island Right-to-Know General Law: This material contains no reportable components.</p> <p>California Prop 65: This material contains no reportable components.</p>
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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. 2 - 2.1.2. Classification - GHS. 2 - Hazard pictograms. 2 - Signal Word. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - Precautionary Statement: Disposal. 11 - Acute toxicity. 11 - STOT-repeated exposure. 15 - Chemical Inventories/Right-to-Know Lists:.
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>GHS: Globally Harmonized System.</p> <p>HCS 2012: Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organization.</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, Authorization, and Restriction of Chemicals.</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>Skin Irrit. 2: H315 - Causes skin irritation.</p> <p>Eye Irrit. 2: H319 - Causes serious eye irritation.</p> <p>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</p>
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Phosphate Buffered Saline, Foil Pouch

Revision 2
Revision date 2019-10-03

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, EXPRESSED 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 29 CFR 1910.1200 and GHS

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K-Blue® Advanced TMB Substrate

Revision 4
Revision date 2019-09-24

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

1.1. Product identifier

Product name	K-Blue® Advanced TMB Substrate
Product code	319171, 319175, 319176, 319177, 319210, 319257,
Product code	319170-W, 319174-W, 319210-L, 319xxx.

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals;
Description	Intended for laboratory use only.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshner 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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Further information

Manufactured By:	Neogen Corporation 944 Nandino Blvd. Lexington, KY 40511-1205 U.S.A.
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SECTION 2: Hazards identification

2.2. Label elements

Hazard Statements	No Significant Hazard
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2.3. Other hazards

Other hazards	May intensify fire; oxidiser.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

K-Blue® Advanced TMB Substrate

Revision 4
Revision date 2019-09-24

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
2-Pyrrolidinone		616-45-5	210-483-1		1 - 10%	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

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

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 dizziness and headache. 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

This product is not flammable. May intensify fire; oxidiser.

5.3. Advice for firefighters

Do not breathe vapor 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

K-Blue® Advanced TMB Substrate

Revision 4
Revision date 2019-09-24

6.1. Personal precautions, protective equipment and emergency procedures

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. Read the entire label and follow all use directions, restrictions, and precautions. Use as appropriate: Protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls



Appropriate engineering controls

Ensure adequate ventilation of the working area.

Individual protection measures

Use as appropriate: Protective equipment.

Eye / face protection

Use as appropriate: Suitable eye protection.

Skin protection - Hand protection

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

K-Blue® Advanced TMB Substrate

Revision 4
Revision date 2019-09-24

9.1. Information on basic physical and chemical properties

State	Liquid
Color	Clear/Light blue
Odor	Characteristic
Odor threshold	No data available
pH	3.1 - 3.5
Melting point	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	Not applicable.
Oxidizing properties	No data available
Solubility	Soluble in water

9.2. Other information

VOC (Volatile organic compounds)	No data available
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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.
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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

11.1. Information on toxicological effects

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.
-----------------------	--

K-Blue® Advanced TMB Substrate

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Revision date 2019-09-24

11.1. Information on toxicological effects

Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitization	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-123. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	No Significant Hazard.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure.

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 Harmonized 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. Ingestion. Skin contact.
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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.
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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

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11.1.13. Other information

Caution - substance not yet fully tested.

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.

Partition coefficient

K-Blue® Advanced TMB Substrate
No data available

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. Other adverse effects

Caution - substance not yet fully tested.

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.

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

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	Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.
Chemical Inventories/Right-to-Know Lists:	<p>--International--</p> <p>Basel Convention (Hazardous Waste): Not applicable.</p> <p>Chemical Weapons Convention (OPCW): This material contains no reportable components.</p> <p>Kyoto Protocol Greenhouse Gases: This material contains no reportable components.</p> <p>Mercosur Agreement: Applicable.</p> <p>Montreal Protocol: This material contains no reportable components.</p> <p>The Rotterdam Convention: This material contains no reportable components.</p> <p>The Stockholm Convention: This material contains no reportable components.</p> <p>--Asia and the ASEAN Nations--</p> <p>Catalog of Hazardous Chemicals (China): No. 101 [Pyrrol-2-one, CAS No. 616-45-5].</p> <p>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 material contains no reportable components.</p> <p>Chemical Substances Control Law (Japan): This material contains no reportable components.</p> <p>Industrial Safety and Health Act, Dangerous Substances (Japan): This material contains no reportable components.</p> <p>Poisonous and Deleterious Substances Act (Japan): This material contains no reportable components.</p> <p>Chemical Substances Subject to Permission (Korea): This material contains no reportable components.</p> <p>Restricted or Prohibited Substances (Korea): This material contains no reportable components.</p> <p>Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This material contains no reportable components.</p> <p>Philippine Inventory of Chemicals and Chemical Substances (PICCS): Toxic Substances and Hazardous and Nuclear Wastes Control Act (RA6969);, [2-Pyrrolidinone, CAS No. 616-45-5].</p> <p>Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This material contains no reportable components.</p> <p>Hazardous Substances Act (Thailand): This material contains no reportable components.</p> <p>Law on Chemicals (Vietnam): This material contains no reportable components.</p> <p>--Australia and New Zealand--</p> <p>Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt.</p> <p>New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.</p> <p>--European Union (EU) and the United Kingdom (UK)--</p> <p>Authorization List (Annex XIV of REACH): All ingredients listed or exempt.</p> <p>Annex XVII for REACH: This material contains no reportable components.</p> <p>Article 95 of the Biocidal Products Regulation (BPR): Not applicable.</p>

K-Blue® Advanced TMB Substrate

Revision 4
Revision date 2019-09-24

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

--North America--.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.

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

Massachusetts Right-to-Know Hazardous Substance List: This material contains no reportable components.

New Jersey Worker and Community Right to Know Act: This material contains no reportable components.

Pennsylvania Right to Know Law: 2-Pyrrolidinone.

Rhode Island Right-to-Know General Law: This material contains no reportable components.

California Prop 65: This material contains no reportable components.

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. 1 - Product code. 1 - Product Use. 1 - . 1 - Manufactured By:. 2 - Other hazards. 5 - 5.2. Special hazards arising from the substance or mixture. 9 - 9.1. Information on basic physical and chemical properties (Explosive properties). 9 - 9.2. Other information (Product Subcategory). 11 - Acute toxicity. 15 - Chemical Inventories/Right-to-Know Lists:. 16 - Maximum content of VOC.
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>GHS: Globally Harmonized System.</p> <p>HCS 2012: Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organization.</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, Authorization, and Restriction of Chemicals.</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>Eye Irrit. 2: H319 - Causes serious eye irritation.</p> <p>Ox. Sol. 3: H272 - May intensify fire; oxidiser.</p> <p>Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.</p> <p>Eye Dam. 1: H318 - Causes serious eye damage.</p>

Further information

DISCLAIMER: The information and recommendations set forth herein ("Information") are presented

K-Blue® Advanced TMB Substrate

Revision 4
Revision date 2019-09-24

Further information

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, EXPRESSED 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 29 CFR 1910.1200 and GHS

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Red Stop Solution

Revision 5
Revision date 2019-09-25

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	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals;
Description	Intended for laboratory use only.

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)
--	--

Further information

Manufactured By:	Neogen Corporation 944 Nandino Blvd. Lexington, KY 40511-1205 U.S.A.
------------------	--

SECTION 2: Hazards identification

2.2. Label elements

Hazard Statements	No Significant Hazard
-------------------	-----------------------

2.3. Other hazards

Other hazards	Contains substance(s) which are hazardous to the environment.
---------------	---

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Red Stop Solution

Revision 5
Revision date 2019-09-25

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	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

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

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 dizziness and headache. 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

	This product is not flammable.
--	--------------------------------

5.3. Advice for firefighters

	Do not breathe vapor 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.
--	---

Red Stop Solution

Revision 5
Revision date 2019-09-25

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. Read the entire label and follow all use directions, restrictions, and precautions. Use as appropriate: Protective clothing.
--	---

7.2. Conditions for safe storage, including any incompatibilities


	Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.
--	---

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls

	
Appropriate engineering controls	Ensure adequate ventilation of the working area.
Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Use as appropriate: Suitable eye protection.
Skin protection - Hand protection	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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Red Stop Solution

Revision 5
Revision date 2019-09-25

9.1. Information on basic physical and chemical properties

State	Liquid
Color	Clear/Red
Odor	Characteristic
Odor threshold	No data available
pH	8.7
Melting point	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	Not applicable.
Oxidizing properties	No data available
Solubility	Soluble in water

9.2. Other information

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 toxicological effects

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.
-----------------------	--

Red Stop Solution

Revision 5
Revision date 2019-09-25

11.1. Information on toxicological effects

Skin corrosion/irritation	May cause irritation to skin.
Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitization	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-123. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	No Significant Hazard.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure.

11.1.2. Mixtures

	See Section(s) 3 for further information.
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11.1.3. Hazard Information

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

	No data available
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11.1.5. Hazard Class

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

11.1.6. Classification Criteria

	Based on the Globally Harmonized 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. Ingestion. Skin contact.
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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

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11.1.13. Other information

Caution - substance not yet fully tested.

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.

Partition coefficient

Red Stop Solution No data available

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. Other adverse effects

Caution - substance not yet fully tested.

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.

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

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	Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.
Chemical Inventories/Right-to-Know Lists:	<p>--International--</p> <p>Basel Convention (Hazardous Waste): Not applicable. Chemical Weapons Convention (OPCW): This material contains no reportable components. Kyoto Protocol Greenhouse Gases: This material contains no reportable components. Mercosur Agreement: Applicable. Montreal Protocol: This material contains no reportable components. The Rotterdam Convention: This material contains no reportable components. The Stockholm Convention: This material contains no reportable components.</p> <p>--Asia and the ASEAN Nations--</p> <p>Catalog of Hazardous Chemicals (China): No. 754 [Sodium fluoride, CAS No. 7681-49-4]. 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 material contains no reportable components. Chemical Substances Control Law (Japan): Class I environmental release [Sodium fluoride, CAS No. 7681-49-4]. Industrial Safety and Health Act, Dangerous Substances (Japan): Labeling/Notification required [], [Sodium fluoride, CAS No. 7681-49-4]. Poisonous and Deleterious Substances Act (Japan): This material contains no reportable components. Chemical Substances Subject to Permission (Korea): This material contains no reportable components. Restricted or Prohibited Substances (Korea): This material contains no reportable components. Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This material contains no reportable components. Philippine Inventory of Chemicals and Chemical Substances (PICCS): Toxic Substances and Hazardous and Nuclear Wastes Control Act (RA6969);, [Sodium fluoride, CAS No. 7681-49-4]. Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): No. 1-84 [Sodium fluoride, CAS No. 7681-49-4]. Hazardous Substances Act (Thailand): This material contains no reportable components. Law on Chemicals (Vietnam): Annex I, Appendix VII [Sodium fluoride, CAS No. 7681-49-4].</p> <p>--Australia and New Zealand--</p> <p>Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt. New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.</p> <p>--European Union (EU) and the United Kingdom (UK)--</p> <p>Authorization List (Annex XIV of REACH): All ingredients listed or exempt. Annex XVII for REACH: This material contains no reportable components.</p>

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

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

--North America--.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.

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

Massachusetts Right-to-Know Hazardous Substance List: This material contains no reportable components.

New Jersey Worker and Community Right to Know Act: This material contains no reportable components.

Pennsylvania Right to Know Law: This material contains no reportable components.

Rhode Island Right-to-Know General Law: This material contains no reportable components.

California Prop 65: This material contains no reportable components.

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. 1 - Product Use. 1 - Manufactured By:. 2 - Other hazards. 9 - 9.1. Information on basic physical and chemical properties (Explosive properties). 9 - 9.2. Other information (Product Subcategory). 10 - 10.5. Incompatible materials. 11 - Acute toxicity. 12 - 12.1. Toxicity. 15 - Chemical Inventories/Right-to-Know Lists:. 16 - Maximum content of VOC.
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>GHS: Globally Harmonized System.</p> <p>HCS 2012: Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organization.</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, Authorization, and Restriction of Chemicals.</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

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Further information

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.

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