



SAFETY DATA SHEET

according to 29 CFR 1910.1200 and GHS

Page 1/9

K-Blue® Advanced TMB Substrate

Revision 5
Revision date 2020-04-28

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 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)
--	--

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 oxidizing substance(s) at <0.5%.
---------------	---

SECTION 3: Composition/information on ingredients

3.2. Mixtures

K-Blue® Advanced TMB Substrate

Revision 5
Revision date 2020-04-28

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-<6%	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 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

Do not allow undiluted product to be released to ground water, water course or sewage system. Contains oxidizing substance(s) at <0.5%.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

K-Blue® Advanced TMB Substrate

Revision 5
Revision date 2020-04-28

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 station.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

K-Blue® Advanced TMB Substrate

Revision 5
Revision date 2020-04-28

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
---	-------------------

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

	Avoid contact with: Combustible materials.
--	--

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

K-Blue® Advanced TMB Substrate

Revision 5
Revision date 2020-04-28

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	No components at >0.01% are listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. No components at >0.01% are listed in the National Toxicology Program (NTP) Report on Carcinogens. No components at >0.01% are listed in the International Agency for Research on Cancer (IARC) Monographs. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	No Significant Hazard.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

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

11.1.3. Hazard Information

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

11.1.4. Toxicological information

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

11.1.5. Hazard Class

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

11.1.6. Classification Criteria

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

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

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

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

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

11.1.10. Interactive effects

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

11.1.11. Absence of specific data

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

11.1.12. Mixture versus substance information

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

K-Blue® Advanced TMB Substrate

Revision 5
Revision date 2020-04-28

11.1.13. Other information

No data is available on this product.

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

Specific test data for the mixture is not available.

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.

K-Blue® Advanced TMB Substrate

Revision 5
Revision date 2020-04-28

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): This material contains no reportable components.</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 5
Revision date 2020-04-28

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 - Manufactured By:. 2 - Other hazards. 4 - Inhalation. 5 - 5.2. Special hazards arising from the substance or mixture. 10 - 10.5. Incompatible materials. 11 - Repeated or prolonged exposure. 11 - Carcinogenicity. 11 - STOT-single exposure. 11 - 11.1.7. Information on likely routes of exposure. 11 - 11.1.13. Other information. 12 - 12.6. Other adverse effects. 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>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

K-Blue® Advanced TMB Substrate

Revision 5
Revision date 2020-04-28

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.