KIT SAFETY DATA SHEET



Kit Product Name Kallestad Mouse Stomach/Kidney Kit

Kit Catalog Number(s) 30443

Revision date 31-Mar-2021

Kit Contents

Catalog Number(s)	Product Name
26111, 26112, 26115***	Kallestad Mouse Stomach Kidney Substrate Slides***
30403***	MNT MED - Kallestad Mounting Media***
30431***	COUNTERSTAIN - Kallestad Evans Blue Counterstain***
30446, 30480***	CONJ FITC - Kallestad FITC Conjugate***
31098***	BUF PBS - Phosphate Buffered Saline (PBS)***
	CTRL (+/-) - Kallestad Controls***
	Kallestad Negative Control***

SAFETY DATA SHEET



Revision date 29-Mar-2021 Revision Number 1

1. Identification

Product identifier

Product Name Kallestad Mouse Stomach Kidney Substrate Slides

Other means of identification

Catalog Number(s) 26111, 26112, 26115

Recommended use of the chemical and restrictions on use

Recommended use In vitro diagnostic

Restricted to professional users

Use according to package label instructions

6565-185th Ave NE

USA

Redmond, WA 98052

Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturer AddressLegal Entity / Contact AddressBio-Rad Laboratories Inc.Bio-Rad Laboratories

Bio-Rad Laboratories Inc.

1000 Alfred Nobel Drive

Hercules, CA 94547

Bio-Rad Laboratories
6565-185th Ave NE
Redmond, WA 98052

USA USA

Technical Service 1-800-224-6723

TechSupport.USSD@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone

Number

CHEMTREC USA: 1 (800) 424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Clear Physical state Slide Odor No information available

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Revision date 29-Mar-2021

Other information

Contains animal source material.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

 Component
 Description

 SLIDES
 Mouse Stomach/Kidney substrate fixed onto glass slides - Handle slides by the edges - Do not apply pressure to surface of foil bag

4. First-aid measures

Description of first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

None known.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eyelface protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protectionWear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Slide Appearance Clear

ColorNo information availableOdorNo information availableOdor thresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pHNo information availableNone knownMelting point / freezing pointNo data availableNone knownBoiling point / boiling rangeNo data availableNone knownFlash pointNo data availableNone known

Kallestad Mouse Stomach Kidney Substrate Slides

Revision date 29-Mar-2021

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility insoluble

Solubility in other solventsNo data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Other information

Explosive propertiesNot applicableOxidizing propertiesNot applicableSoftening pointNot applicableMolecular weightNot applicableVOC Content (%)Not applicable

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

None known based on information supplied.

None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

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

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

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

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. Respiratory or skin sensitization

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. STOT - single exposure

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

The environmental impact of this product has not been fully investigated. **Ecotoxicity**

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State RegulationsThis product does not contain any substances regulated by state right-to-know regulations

US State Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 0 Flammability 0 Instability 0 Physical and chemical

properties -

HMIS Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 29-Mar-2021

Revision Note*** Indicates this information has changed since the previous revision.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Legal Entity / Contact Address

Bio-Rad Laboratories

Redmond, WA 98052

6565-185th Ave NE

USA

Revision date 31-Mar-2021 Revision Number 2

1. Identification

Product identifier

Product Name MNT MED - Kallestad Mounting Media

Other means of identification

Catalog Number(s) 30403

Recommended use of the chemical and restrictions on use

Recommended use In-vitro laboratory reagent or component

Restricted to professional users

Use according to package label instructions

Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturer AddressBio-Rad Laboratories Inc.Bio-Rad Laboratories

Hercules, CA 94547

Bio-Rad Laboratories
Bio-Rad Laboratories
Bio-Rad Laboratories
Bio-Rad Laboratories
Bio-Rad Laboratories
Redmond, WA 98052

USA USA

Technical Service 1-800-224-6723

TechSupport.USSD@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone

Number

CHEMTREC USA: 1 (800) 424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance aqueous solution Physical state Liquid Odor No information available

Other information

Causes mild skin irritation.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Component Description

MNT	MED	A semi	permanent buffered mo	unting media	in a Trizma	buffered solution	n, pH 7-8. 7	7.5% Polyviny	
		Alcoho	I. 20% 1,2-Propanediol.	Anti-quench	er				

Chemical name	CAS No	Weight-%	Trade secret
Hydrochloric acid	7647-01-0	0.1 - 0.299	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Symptoms Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

None known.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits .

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric acid	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm	IDLH: 50 ppm
7647-01-0		(vacated) Ceiling: 7 mg/m ³	Ceiling: 5 ppm
		Ceiling: 5 ppm	Ceiling: 7 mg/m ³
		Ceiling: 7 mg/m ³	

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearanceaqueous solutionColorClear, colorless

Odor No information available
Odor threshold No information available

Property Values Remarks • Method

pН 6-8

Melting point / freezing point No data available None known No data available None known **Boiling point / boiling range** None known No data available Flash point None known **Evaporation rate** No data available Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

No data available None known Vapor pressure Vapor density No data available None known No data available Relative density None known

Water solubility Miscible in water Solubility in other solvents No data available

None known Partition coefficient No data available None known **Autoignition temperature** No data available None known **Decomposition temperature** None known Kinematic viscosity No data available

None known No data available **Dynamic viscosity** None known

Other information

Explosive properties Not applicable Not applicable **Oxidizing properties** Softening point Not applicable Molecular weight Not applicable **VOC Content (%)** Not applicable

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

None known based on information supplied. Conditions to avoid

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

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

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

Specific test data for the substance or mixture is not available. Causes mild skin irritation. Skin contact

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 40,476.20 mg/kg **ATEmix (dermal)** 57,379.31 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid 7647-01-0	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat)1 h

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

Skin corrosion/irritationClassification based on data available for ingredients. May cause skin irritation.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrochloric acid	-	Group 3	-	X
7647-01-0				

Legend

IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposureBased on available data, the classification criteria are not met.

Target organ effects Respiratory system, Eyes, Skin.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity .

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrochloric acid	-	LC50: =282mg/L (96h,	-	-
7647-01-0		Gambusia affinis)		

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

Revision date 31-Mar-2021

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOTNot regulatedTDGNot regulatedMEXNot regulatedIATANot regulatedIMDGNot regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Hydrochloric acid - 7647-01-0	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrochloric acid 7647-01-0	5000 lb	-	-	Χ

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Hydrochloric acid	5000 lb	5000 lb
7647-01-0		

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations

This product does not contain any substances regulated by state right-to-know regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hydrochloric acid	X	X	X
7647-01-0			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 0 Flammability 0 Instability 0 Physical and chemical

properties -

Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

MNT MED - Kallestad Mounting Media

Revision date 31-Mar-2021

World Health Organization

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 31-Mar-2021

Revision Note*** Indicates this information has changed since the previous revision.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Bio-Rad Laboratories

Redmond, WA 98052

6565-185th Ave NE

USA

Revision date 29-Mar-2021 Revision Number 1

1. Identification

Product identifier

Product Name COUNTERSTAIN - Kallestad Evans Blue Counterstain

Other means of identification

Catalog Number(s) 30431

Recommended use of the chemical and restrictions on use

Recommended use In-vitro laboratory reagent or component

Restricted to professional users

Use according to package label instructions

Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u> <u>Manufacturer Address</u> <u>Legal Entity / Contact Address</u>

Bio-Rad Laboratories Inc.

Bio-Rad Laboratories

1000 Alfred Nobel Drive

Hercules, CA 94547

Bio-Rad Laboratories

6565-185th Ave NE

Redmond, WA 98052

USA USA

Technical Service 1-800-224-6723

TechSupport.USSD@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone

Number

CHEMTREC USA: 1 (800) 424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance aqueous solution Physical state No information available Odor No information available

Other information

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Component Description

COUNTERSTAIN ≤2% Evans' blue stain - 0.1% Sodium Azide preservative

Chemical name	CAS No	Weight-%	Trade secret
Sodium azide	26628-22-8	0.1 - 0.299	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

None known.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium azide	Sodium azide Ceiling: 0.29 mg/m ³ Sodium		Ceiling: 0.1 ppm HN3
26628-22-8	26628-22-8 azide		Ceiling: 0.3 mg/m ³ NaN3
	Ceiling: 0.11 ppm Hydrazoic		
	acid vapor	NaN3	

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protectionWear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state No information available Appearance aqueous solution

Color blue

Odor No information available
Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 6-8

Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point No data available None known None known **Evaporation rate** No data available Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Miscible in water
Solubility in other solvents No data available

Solubility in other solventsNo data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone knownVinematic vinematicNone known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Other information

Explosive properties
Oxidizing properties
Not applicable
Softening point
Molecular weight
VOC Content (%)
Not applicable
Not applicable
Not applicable

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions Avoid contact with metals. This product contains sodium azide. Sodium azide can react with

copper, brass, lead, and solder in piping systems to form explosive compounds and toxic

gases.

Conditions to avoidNone known based on information supplied.

Incompatible materials Metals.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.IngestionSpecific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

COUNTERSTAIN - Kallestad Evans Blue Counterstain

Revision date 29-Mar-2021

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name Oral LD50		Dermal LD50	Inhalation LC50	
	Sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit)	-
	26628-22-8		= 50 mg/kg (Rat)	

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

Skin corrosion/irritationBased on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposureBased on available data, the classification criteria are not met.

Aspiration hazard

Other adverse effects

No information available.

No information available.

No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium azide	-	LC50: =0.7mg/L (96h,	-	-
26628-22-8		Lepomis macrochirus)		
		LC50: =0.8mg/L (96h,		
		Oncorhynchus mykiss)		
		LC50: =5.46mg/L (96h,		
		Pimephales promelas)		

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems. Dispose of in accordance with local regulations. Dispose of waste in

accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium azide 26628-22-8	-	P105	-	-

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status	
Sodium azide	Ignitable	
26628-22-8	Reactive	

14. Transport information

DOT Not regulated TDG Not regulated Not regulated MEX Not regulated <u>IATA</u>

IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Sodium azide - 26628-22-8	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sodium azide	1000 lb	1000 lb
26628-22-8		

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations

This product does not contain any substances regulated by state right-to-know regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium azide	X	X	X
26628-22-8			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 0 Flammability 0 Instability 0 Physical and chemical

properties -

Revision date 29-Mar-2021

Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

COUNTERSTAIN - Kallestad Evans Blue Counterstain

Revision date 29-Mar-2021

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 29-Mar-2021

Revision Note*** Indicates this information has changed since the previous revision.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Legal Entity / Contact Address

Bio-Rad Laboratories

Redmond, WA 98052

6565-185th Ave NE

USA

Revision date 29-Mar-2021 Revision Number 1

1. Identification

Product identifier

Product Name CONJ FITC - Kallestad FITC Conjugate

Other means of identification

Catalog Number(s) 30446, 30480

Recommended use of the chemical and restrictions on use

Recommended use In-vitro laboratory reagent or component

Restricted to professional users

Use according to package label instructions

Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturer AddressBio-Rad Laboratories Inc.Bio-Rad Laboratories

1000 Alfred Nobel Drive 6565-185th Ave NE Hercules, CA 94547 Redmond, WA 98052

USA USA

Technical Service 1-800-224-6723

TechSupport.USSD@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone

Number

CHEMTREC USA: 1 (800) 424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance aqueous solution Physical state Liquid Odor No information available

Other information

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Component Description

CONJ FITC

Fluorescein conjugated antiserum to human immunoglobulins. 1% bovine serum albumin. Phosphate

Buffered Saline solution (pH ~ 7). 0.1% sodium azide preservative

Chemical name	CAS No	Weight-%	Trade secret
Sodium azide	26628-22-8	0.1 - 0.299	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

None known.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits .

	Chemical name	Chemical name ACGIH TLV		NIOSH IDLH
Ī	Sodium azide Ceiling: 0.29 mg/m³ Sodium		(vacated) S*	Ceiling: 0.1 ppm HN3
1	26628-22-8 azide		(vacated) Ceiling: 0.1 ppm HN3	Ceiling: 0.3 mg/m ³ NaN3
		Ceiling: 0.11 ppm Hydrazoic	(vacated) Ceiling: 0.3 mg/m ³	
1		acid vapor	NaN3	

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution

Color clear

Odor No information available
Odor threshold No information available

Property Values Remarks • Method

pH 6-8

Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point No data available None known None known **Evaporation rate** No data available Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility

Solubility in other solvents

Miscible in water
No data available

Solubility in other solventsNo data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Other information

Explosive properties
Oxidizing properties
Not applicable
Softening point
Not applicable
Molecular weight
VOC Content (%)
Not applicable
Not applicable

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions Avoid contact with metals. This product contains sodium azide. Sodium azide can react with

copper, brass, lead, and solder in piping systems to form explosive compounds and toxic

gases.

Conditions to avoidNone known based on information supplied.

Incompatible materials Metals.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.IngestionSpecific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

CONJ FITC - Kallestad FITC Conjugate

Revision date 29-Mar-2021

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit)	-
26628-22-8		= 50 mg/kg (Rat)	

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

Skin corrosion/irritationBased on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposureBased on available data, the classification criteria are not met.

Aspiration hazard

Other adverse effects

No information available.

No information available.

No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium azide	-	LC50: =0.7mg/L (96h,	-	-
26628-22-8		Lepomis macrochirus)		
		LC50: =0.8mg/L (96h,		
		Oncorhynchus mykiss)		
		LC50: =5.46mg/L (96h,		
		Pimephales promelas)		

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

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Waste treatment methods

Waste from residues/unused

products

Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems. Dispose of in accordance with local regulations. Dispose of waste in

Revision date 29-Mar-2021

accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium azide 26628-22-8	-	P105	-	-

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status	
Sodium azide	Ignitable	
26628-22-8	Reactive	

14. Transport information

DOTNot regulatedTDGNot regulated

MEX Not regulated

<u>IATA</u> Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Sodium azide - 26628-22-8	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sodium azide	1000 lb	1000 lb
26628-22-8		

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations

This product does not contain any substances regulated by state right-to-know regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium azide	X	X	X
26628-22-8			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 0 Flammability 0 Instability 0 Physical and chemical

properties -

Revision date 29-Mar-2021

Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

CONJ FITC - Kallestad FITC Conjugate

Revision date 29-Mar-2021

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 29-Mar-2021

Revision Note*** Indicates this information has changed since the previous revision.

Disclaimer

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End of Safety Data Sheet

SAFETY DATA SHEET



Legal Entity / Contact Address

Bio-Rad Laboratories

Redmond, WA 98052

6565-185th Ave NE

USA

Revision date 01-Mar-2021 Revision Number 1

1. Identification

Product identifier

Product Name BUF PBS - Phosphate Buffered Saline (PBS)

Other means of identification

Catalog Number(s) 31098

Recommended use of the chemical and restrictions on use

Recommended use Restricted to professional users

In-vitro laboratory reagent or component Use according to package label instructions

Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturer AddressBio-Rad Laboratories Inc.Bio-Rad Laboratories

1000 Alfred Nobel Drive 6565-185th Ave NE Hercules, CA 94547 Redmond, WA 98052

USA USA

Technical Service 1-800-224-6723

TechSupport.USSD@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone

Number

CHEMTREC USA: 1 (800) 424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Powder Physical state Solid Odor No information available

Other information

May be harmful if swallowed.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Component	Description
BUF PBS***	Each vial contains 11.34 gm phosphate buffered saline prepared with dibasic sodium phosphate,
	monobasic sodium phosphate, and sodium chloride

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

None known.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. **Methods for containment**

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Advice on safe handling

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

> Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Solid Physical state **Appearance** Powder Color Off-white

Odor No information available Odor threshold No information available

Values_ Property Remarks • Method

pН 7-8

No data available Melting point / freezing point None known Boiling point / boiling range No data available None known Flash point No data available None known

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility

Miscible in water

No data available

National Augustianus

No data available

Solubility in other solventsNo data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Other information

Explosive propertiesNot applicableOxidizing propertiesNot applicableSoftening pointNot applicableMolecular weightNot applicableVOC Content (%)Not applicable

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

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

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

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

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

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Revision date 01-Mar-2021

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 3,813.40 mg/kg **ATEmix (dermal)** 13,346.70 mg/kg

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

Skin corrosion/irritationBased on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposureBased on available data, the classification criteria are not met.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity .

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations This product does not contain any substances regulated by state right-to-know regulations

US State Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 0 Flammability 0 Instability 0 Physical and chemical

properties -

HMIS Health hazards 1 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA (time-weighted average) TWA STEL (Short Term Exposure Limit) STEL

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Bio-Rad Laboratories, Environmental Health and Safety **Prepared By**

Revision date 01-Mar-2021

*** Indicates this information has changed since the previous revision. **Revision Note**

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End of Safety Data Sheet

SAFETY DATA SHEET



Legal Entity / Contact Address

Bio-Rad Laboratories

Redmond, WA 98052

6565-185th Ave NE

USA

Revision date 29-Mar-2021 Revision Number 1

1. Identification

Product identifier

Product Name CTRL (+/-) - Kallestad Controls

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use In-vitro laboratory reagent or component

Restricted to professional users

Use according to package label instructions

Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturer AddressBio-Rad Laboratories Inc.Bio-Rad Laboratories

1000 Alfred Nobel Drive 6565-185th Ave NE Hercules, CA 94547 Redmond, WA 98052

USA USA

Technical Service 1-800-224-6723

TechSupport.USSD@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone

Number

CHEMTREC USA: 1 (800) 424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance aqueous solution Physical state Liquid Odor No information available

Other information

Contains human source material and / or potentially infectious components.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

ComponentDescriptionKallestad Positive ControlKallestad Homogenous/ Anti-nDNA Positive control - Pooled human serum with a specific autoantibody activity. 1% bovine serum albumin. 0.1% sodium azide preservativeKallestad NegativeKallestad Negative Control - Pooled human serum. 1% bovine serum albumin. 0.1% sodium azide preservative

4. First-aid measures

Description of first aid measures

General advice No hazards which require special first aid measures.

Inhalation Remove to fresh air.

Eye contact Contains human source material and / or potentially infectious components. Call a

physician.

Skin contact Wash skin with soap and water.

Ingestion Call a physician. Contains human source material and / or potentially infectious

components.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Contains human source material and / or potentially infectious components.

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

None known.

chemical

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment for Firefighters should wear self-contained breathing apparatus and full firefighting turnout

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

fire-fighters gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

Methods and material for containment and cleaning up

Do not allow into any sewer, on the ground or into any body of water. Methods for containment

Methods for cleaning up Clean contaminated surface thoroughly. Use:. Disinfectant.

7. Handling and storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Advice on safe handling

Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

> Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

No protective equipment is needed under normal use conditions. If exposure limits are Respiratory protection

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Follow universal and standard precautions for handling potentially infectious materials.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

aqueous solution **Appearance**

amber Color

Odor No information available No information available Odor threshold

Values Remarks • Method **Property**

6-8 pН

Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point No data available None known **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility Miscible in water
Solubility in other solvents No data available

Solubility in other solventsNo data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Other information

Explosive properties

Oxidizing properties

Not applicable

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions
Avoid contact with metals. This product contains sodium azide. Sodium azide can react with

copper, brass, lead, and solder in piping systems to form explosive compounds and toxic

gases.

Conditions to avoid None known based on information supplied.

Incompatible materials Metals.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.IngestionSpecific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

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

Skin corrosion/irritationBased on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicityBased on available data, the classification criteria are not met.

STOT - single exposureBased on available data, the classification criteria are not met.

STOT - repeated exposureBased on available data, the classification criteria are not met.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems. Dispose of in accordance with local regulations. Dispose of waste in

accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

TDG Not regulated

Not regulated MEX

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations This product does not contain any substances regulated by state right-to-know regulations

US State Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

Health hazards 0 Flammability 0 Instability 0 Physical and chemical NFPA

properties -

HMIS Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA (time-weighted average) STEL (Short Term Exposure Limit) TWA STEL

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 29-Mar-2021

*** Indicates this information has changed since the previous revision. **Revision Note**

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet