# **KIT SAFETY DATA SHEET**



AUTOPHAGY ASSAY, RED DETECTION KIT **Kit Product Name** 

Kit Catalogue Number(s) Not applicable

**Revision date** 28-Feb-2022

## **Kit Contents**

Catalogue Number(s)	Product Name	
	FIXATIVE - #10498	
	AUTOPHAGY PROBE, RED - #20402	

KIT / BE Page 1/17



# **SAFETY DATA SHEET**

This safety data sheet was created pursuant to the requirements of: The Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Revision date 17-Nov-2021 Revision Number 1

## 1. IDENTIFICATION

Product identifier

Product Name FIXATIVE - #10498

Other means of identification

Safety data sheet number 10498

Registration Number(s) No information available

Recommended use of the chemical and restrictions on use
Recommended use For research use only

Supplier's details

Corporate HeadquartersManufacturerLegal Entity / Contact AddressBio-Rad Laboratories Inc.Bio-RadBio-Rad Laboratories Pvt. Ltd.

1000 Alfred Nobel Drive Endeavour House Bio-Rad House Hercules, CA 94547 Endeavour House Bio-Rad House Langford Business Park 86-87, Udyog V

Hercules, CA 94547 Langford Business Park 86-87, Udyog Vihar Phase IV Gurgaon USA Kidlington 122005

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South Africa

**Technical Service** India: 91-124-4029300 or 1-800-180-1224

South Africa: 27-11-442-85-08 India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC India: 000-800-100-7141

CHEMTREC South Africa: 0-800-983-611

### 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Gases)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1
Acute aquatic toxicity	Category 3

GHS Label elements, including precautionary statements







Signal word

Danger

### **Hazard statements**

Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Suspected of causing genetic defects
May cause cancer
Causes damage to organs
Harmful to aquatic life

## **Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Do not breathe dust/fume/gas/mist/vapors/spray Contaminated work clothing should not be allowed out of the workplace

# Avoid release to the environment **Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention Immediately call a POISON CENTER or doctor

IF exposed or concerned: Call a POISON CENTER or doctor

### Eyes

Immediately call a POISON CENTER or doctor

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

#### Skin

IF ON SKIN: Wash with plenty of water and soap Call a POISON CENTER or doctor if you feel unwell

Take off contaminated clothing and wash it before reuse

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

## Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor if you feel unwell

Immediately call a POISON CENTER or doctor

### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

### **Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

### Other hazards which do not result in classification

No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substance

Not applicable

### **Mixture**

Chemical name	CAS No	Weight-%
Formaldehyde 50-00-0	50-00-0	10
Methanol 67-56-1	67-56-1	4

### 4. FIRST AID MEASURES

### Description of necessary first aid measures

**General advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required. IF exposed or concerned: Get medical advice/attention.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.

**Skin contact**Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention. May cause an allergic skin

reaction.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eve wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Get immediate medical advice/attention.

**Ingestion** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Get immediate medical advice/attention.

For emergency responders

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid breathing vapors or mists. Use personal protective equipment as required. See

section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in

breathing.

Indication of immediate medical attention and special treatment needed, if necessary

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause

sensitization in susceptible persons. Treat symptomatically.

## 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media

Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May

cause sensitization by skin contact.

Special protective actions for fire-fighters

Special protective equipment and precautions 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

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal Personal precautions

> protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.

Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

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.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information Refer to protective measures listed in Sections 7 and 8.

### 7. HANDLING AND STORAGE

Precautions for safe handling

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

skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes. Avoid breathing

vapors or mists.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Store locked up. Protect from moisture. Store away from other materials.

Incompatible materials Acids. Bases. Oxidizing agent.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control parameters

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	Ontario	European Union
Formaldehyde	dermal sensitizer;respiratory	TWA: 0.75 ppm	TWA: 0.1 ppm	TWA: 0.37 mg/m <sup>3</sup>
50-00-0	sensitizer	(vacated) TWA: 3 ppm	STEL: 1 ppm	TWA: 0.3 ppm
	STEL: 0.3 ppm	unless specified in		*

	TWA: 0.1 ppm	1910.1					
		(vacated) STE					
		30 min unless	specified in				
		1910.1	048				
		(vacated) Ceil	ing: 5 ppm				
		unless spe	cified in				
		1910.1	048				
		STEL: 2 ppm s	ee 29 CFR				
		1910.1	048				
Methanol	STEL: 250 ppm	TWA: 20	mag (	TWA	\: 200 ppm		TWA: 200 ppm
67-56-1	TWA: 200 ppm	TWA: 260			L: 250 ppm		TWA: 260 mg/m <sup>3</sup>
	S*	(vacated) TW/	0		Skin		*
		(vacated) TWA					
		(vacated) STE					
		(vacated) STEL					
		(vacated) CTEE					
Chemical name	China	Japan Society of	<del>'</del>	EL	Australia		Taiwan
One mical manie	Olilla	Occupational Health	_		Australia		laiwan
Formaldehyde	Ceiling: 0.5 mg/m <sup>3</sup>	Ceiling: 0.2 ppm		).3 ppm	1 ppm		TWA: 1 ppm
50-00-0	Ceiling	Ceiling: 0.24 mg/m <sup>3</sup>	I IVVA. C	л.э ррпп	1.2 mg/m <sup>3</sup>		TWA: 1.2 mg/m <sup>3</sup>
30-00-0	Sensitizer+	, ,			2 ppm STEL		ı
		TWA: 0.1 ppm					STEL: 2 ppm
	G1(C**)	TWA: 0.12 mg/m <sup>3</sup>			2.5 mg/m³ STI	EL	STEL: 2.4 mg/m <sup>3</sup>
Methanol	TWA: 25 mg/m <sup>3</sup>	TWA: 200 ppm		00 ppm	200 ppm		TWA: 200 ppm
67-56-1	STEL: 50 mg/m <sup>3</sup>	TWA: 260 mg/m <sup>3</sup>		250 ppm	262 mg/m <sup>3</sup>		TWA: 262 mg/m <sup>3</sup>
	Skin*	S*	Sk	in*	250 ppm STE		STEL: 250 ppm
					328 mg/m <sup>3</sup> ST	EL	STEL: 327.5 mg/m <sup>3</sup> Skin*

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles. Face protection shield.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

**Hand protection** Wear suitable gloves. Impervious gloves.

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

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

No information available

No information available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state Liquid

AppearanceClear to semi-clearOdourNo information availableColourVariesOdour thresholdNo information available

Property Values Remarks • Method

pHNo information availableMelting point / freezing pointNo information availableBoiling point / boiling rangeNo information availableFlash pointNo information available

Evaporation rate
Flammability (solid, gas)

Upper/lower flammability or explosive limits
Upper flammability or explosive Not applicable

limits

Lower flammability or explosive Not applicable

limits

Vapour pressureNo information availableVapour densityNo information availableRelative densityNo information available

Solubility(ies)

Water solubility

Soluble in water

Solubility in other solventsNo information availablePartition coefficientNo information availableAutoignition temperatureNo information availableDecomposition temperatureNo information available

**Viscosity** 

Kinematic viscosity

No information available

Dynamic viscosity

**Other information** 

Oxidising properties Not applicable

## 10. STABILITY AND REACTIVITY

Reactivity

**Reactivity** No information available.

Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None Sensitivity to static discharge None

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

**Conditions to avoid** Exposure to air or moisture over prolonged periods. Excessive heat.

Incompatible materials

Incompatible materials Acids. Bases. Oxidizing agent.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

## Information on the likely routes of exposure

### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. Corrosive by inhalation.

(based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

Pulmonary edema can be fatal. Harmful by inhalation.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye

damage. (based on components). Corrosive to the eyes and may cause severe damage

including blindness. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Corrosive. (based on

components). Causes burns. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May be

absorbed through the skin in harmful amounts. Harmful in contact with skin.

**Ingestion** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes.

Hives.

#### Acute toxicity

### Numerical measures of toxicity

Oral LD50No information availableDermal LD50No information availableInhalation LC50No information availableInhalation LC50No information available

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

 ATEmix (oral)
 714.30 mg/kg

 ATEmix (dermal)
 1,985.29 mg/kg

 ATEmix (inhalation-gas)
 7,000.00 ppm

 ATEmix (inhalation-dust/mist)
 3.58 mg/l

 ATEmix (inhalation-vapour)
 1,042.40 mg/l

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Formaldehyde	= 100 mg/kg (Rat)	> 2000 mg/kg (Rat)	< 463 ppm (Rat) 4 h
Methanol	= 6200 mg/kg (Rat)	= 15840 mg/kg ( Rabbit )	= 22500 ppm (Rat) 8 h

### Delayed and immediate effects and also chronic effects from short and long term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes burns.

**Serious eye damage/irritation** Classification based on data available for ingredients. Risk of serious damage to eyes.

Causes burns.

**Respiratory or skin sensitization** May cause sensitization by skin contact.

Germ cell mutagenicity Contains a known or suspected mutagen. Classification based on data available for

ingredients. Suspected of causing genetic defects.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.

Chemical name	IARC
Formaldehyde	Group 1

**Reproductive toxicity**No information available.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the

country or region with which this safety data sheet complies, this product has been

determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

Causes damage to organs if inhaled.

**STOT - repeated exposure** No information available.

Target organ effects Respiratory system, Eyes, Skin, Central nervous system, Gastrointestinal tract (GI).

**Aspiration hazard** No information available.

## 12. ECOLOGICAL INFORMATION

### **Toxicity**

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Ecotoxicity** Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Formaldehyde	-	LC50: 0.032 - 0.226mL/L (96h,	EC50: 11.3 - 18mg/L (48h, Daphnia
		Oncorhynchus mykiss)	magna)
		LC50: 100 - 136mg/L (96h,	LC50: =2mg/L (48h, Daphnia
		Oncorhynchus mykiss)	magna)
		LC50: 22.6 - 25.7mg/L (96h,	
		Pimephales promelas)	
		LC50: 23.2 - 29.7mg/L (96h,	
		Pimephales promelas)	
		LC50: =1510µg/L (96h, Lepomis	
		macrochirus)	
		LC50: =41mg/L (96h, Brachydanio	
		rerio)	
Methanol	-	LC50: 13500 - 17600mg/L (96h,	-
		Lepomis macrochirus)	
		LC50: 18 - 20mL/L (96h,	
		Oncorhynchus mykiss)	
		LC50: 19500 - 20700mg/L (96h,	
		Oncorhynchus mykiss)	
		LC50: =28200mg/L (96h,	
		Pimephales promelas)	
		LC50: >100mg/L (96h, Pimephales	
		promelas)	

### Persistence and degradability

No information available.

### **Bioaccumulative potential**

There is no data for this product.

## **Mobility**

Mobility in soilNo information available.MobilityNo information available.

Chemical name	Partition coefficient	
Formaldehyde	0.35	
Methanol	-0.77	

### Other adverse effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

Disposal 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

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC

No information available

Code

IATA Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

Special precautions for user

Special provisions from the regulations relative to the specified mode of transport are noted

by numeric code. Refer to the regulations for the full text of special provisions.

### 15. REGULATORY INFORMATION

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

**International Regulations** 

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

**International Inventories** 

Contact supplier for inventory compliance status

## **16. OTHER INFORMATION**

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 17-Nov-2021

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

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

C Carcinogen

#### 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

This safety data sheet was created pursuant to the requirements of: The Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Revision date 08-Feb-2021 Revision Number 1

1. IDENTIFICATION

Product identifier

Product Name AUTOPHAGY PROBE, RED - #20402

Other means of identification

Safety data sheet number 20402

Registration Number(s) No information available

Recommended use of the chemical and restrictions on use
Recommended use For research use only

Supplier's details

Corporate HeadquartersManufacturerLegal Entity / Contact AddressBio-Rad Laboratories Inc.Bio-RadBio-Rad Laboratories Pvt. Ltd.

1000 Alfred Nobel Drive Endeavour House Bio-Rad House

Hercules, CA 94547 Langford Business Park 86-87, Udyog Vihar Phase IV Gurgaon USA Kidlington 122005

Kidlington 122005 Oxford Haryana India OX5 1GE

United Kingdom Bio-Rad Laboratories (Pty) Ltd.

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South Africa: 27-11-442-85-08 India: support.india@bio-rad.com

South Africa: cdg\_techsupport\_eemea@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC India: 000-800-100-7141

CHEMTREC South Africa: 0-800-983-611

### 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

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

GHS Label elements, including precautionary statements

### Other hazards which do not result in classification

No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Substance**

Chemical name	CAS No	Weight-%

GHS / BE Page 12/17

Trade secret	-	90 - 100%

## 4. FIRST AID MEASURES

Description of necessary first aid measures

**Inhalation** Remove to fresh air.

**Skin contact** Wash skin with soap and water. In the case of skin irritation or allergic reactions see a

physician.

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

Consult a physician.

**Ingestion** Rinse mouth thoroughly with water.

For emergency responders

**Self-protection of the first aider** No information available.

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

Indication of immediate medical attention and special treatment needed, if necessary

**Note to physicians** Treat symptomatically.

## 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

No information available.

Special protective actions for fire-fighters

Special protective equipment and precautions 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** Ensure adequate ventilation.

Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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

Revision date 08-Feb-2021

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

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

## 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 Keep containers tightly closed in a dry, cool and well-ventilated place.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines 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).

**Skin and body protection** Wear suitable protective clothing.

Hand protection Wear suitable gloves.

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 Solid

Appearance Solid, (white to off-white) powder or Odour No information available

cake, lyophilised

**Colour** Varies **Odour threshold** No information available

Property Values Remarks • Method

pH No information available
Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation rate
Flammability (solid, gas)
No information available
No information available
No information available
No information available

Upper/lower flammability or explosive limits

Upper flammability or explosive Not applicable

limits

Lower flammability or explosive Not applicable

limits

Vapour pressure No information available

Revision date 08-Feb-2021

Vapour density No information available Relative density No information available

Solubility(ies)

Water solubility

Insoluble in water

Solubility in other solvents No information available No information available **Partition coefficient** No information available **Autoignition temperature** No information available **Decomposition temperature** 

Viscosity

Kinematic viscosity

**Dynamic viscosity** 

No information available

Other information

**Oxidising properties** Not applicable

## 10. STABILITY AND REACTIVITY

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None Sensitivity to static discharge

Possibility of hazardous reactions

Possibility of hazardous reactions 
None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

## Information on the likely routes of exposure

### **Product Information**

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

Eve 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.

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

No information available. **Symptoms** 

Acute toxicity

\_\_\_\_\_

### Numerical measures of toxicity

Dermal LD50No information availableInhalation LC50No information availableInhalation LC50No information available

### Delayed and immediate effects and also chronic effects from short and long term exposure

**Skin corrosion/irritation**No information available.

**Serious eye damage/irritation** No information available.

**Respiratory or skin sensitization** No information available.

Germ cell mutagenicity No information available.

**Carcinogenicity** No information available.

Reproductive toxicity No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure**No information available.

**Aspiration hazard** No information available.

## 12. ECOLOGICAL INFORMATION

## **Toxicity**

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

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

### Persistence and degradability

No information available.

### Bioaccumulative potential

No information available.

**Mobility** 

Mobility in soilNo information available.MobilityNo information available.

### Other adverse effects

No information available.

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues/unused

products

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

Revision date 08-Feb-2021

Contaminated packaging Do not reuse empty containers.

## 14. TRANSPORT INFORMATION

**IMDG** Not regulated

No information available Transport in bulk according to

Annex II of MARPOL and the IBC

Not regulated IATA

RID Not regulated

Not regulated ADR

Not regulated ADN

Special precautions for user Special provisions from the regulations relative to the specified mode of transport are noted

by numeric code. Refer to the regulations for the full text of special provisions.

### 15. REGULATORY INFORMATION

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

**International Regulations** 

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

**International Inventories** 

Contact supplier for inventory compliance status

## 16. OTHER INFORMATION

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

08-Feb-2021 Revision date

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

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Maximum limit value Skin designation Ceiling

Carcinogen

### 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