KIT SAFETY DATA SHEET



Kit Product Name MITOCHONDRIAL PERM TRANSITION KIT

Kit Catalogue Number(s) Not applicable

Revision date 18-Mar-2022

Kit Contents

Catalogue Number(s)	Product Name
	10X ASSAY BUFFER - #10474
	CCCP REAGENT - #10479
	5,5',6,6'-TETRACHLORO-1,1',3,3'-TETRAETHYLBENZIM
	IDAZOLOCARBOCYANINE IDODIDE - #20291

KIT / BE Page 1/22



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 11-Mar-2022 Revision Number 2

1. IDENTIFICATION

Product identifier

Product Name 10X ASSAY BUFFER - #10474

Other means of identification

Safety data sheet number 10474

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.

e-mail: 34 Bolton Road

antibody_safetydatasheets@bio-rad.com Parkwood, Johannesburg 2193

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

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

Not applicable

Mixture

4. FIRST AID MEASURES

Description of necessary first aid measures

Inhalation Remove to fresh air.

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

physician.

Eye contactRinse 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 aiderNo 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

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media

surrounding environment.

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

Unsuitable extinguishing mediaDo 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.

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

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

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls Showers

> Evewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Skin and body protection Wear suitable protective clothing.

Hand protection Wear suitable gloves.

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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance Clear to semi-clear Odour No information available Colour **Odour threshold** Varies No information available

Remarks • Method Property Values

No information available Hq No information available Melting point / freezing point Boiling point / boiling range No information available Flash point No information available **Evaporation rate** No information available Flammability (solid, gas) 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 Vapour density No information available Relative density No information available

Solubility(ies)

Water solubility

Soluble in water

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

Decomposition temperature

No information available

Viscosity Kinematic viscosity

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 avoidNone known based on information supplied.

Incompatible materials

Incompatible materialsNone 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.

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 No information available.

Acute toxicity

Numerical measures of toxicity

Oral LD50 No information available

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/irritationNo 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

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility

Mobility in soil No information available.

Mobility No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

products

Waste from residues/unused

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 No information available

Annex II of MARPOL and the IBC

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 11-Mar-2022

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 19-Nov-2021 Revision Number 1

1. IDENTIFICATION

Product identifier

Product Name CCCP REAGENT - #10479

Other means of identification

Safety data sheet number 10479

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 DriveEndeavour HouseBio-Rad HouseHercules, CA 94547Langford Business Park86-87, 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 - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 3

GHS Label elements, including precautionary statements



Signal word Danger

Hazard statements Toxic if inhaled

Revision date 19-Nov-2021

Causes mild skin irritation

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Skin

If skin irritation occurs: Get medical advice/attention

Inhalation

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

Call a POISON CENTER or doctor

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

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-%
Propanedinitrile, [(3-chlorophenyl)hydrazono]-	555-60-2	1
555-60-2		

4. FIRST AID MEASURES

Description of necessary first aid measures

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

attendance.

Inhalation If breathing has stopped, give artificial respiration. Get medical attention immediately.

Remove to fresh air. Immediate medical attention is required. 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.

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

physician.

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

Consult a physician.

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

person. Call a physician or poison control center immediately.

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. 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. Do not breathe vapor or mist. Use personal protective equipment as required. See section 8 for

more information.

Most important symptoms and effects, both acute and delayed

Symptoms Coughing and/ or wheezing. Difficulty in breathing. Prolonged contact may cause redness

and irritation.

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

Note to physicians 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

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. Avoid contact with skin, eyes or clothing. Do not breathe vapor

or mist. Use personal protective equipment as required. Evacuate personnel to safe areas.

Keep people away from and upwind of spill/leak.

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.

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

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

skin, eyes or clothing. Do not breathe vapor or mist. 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.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Chemical name	ACGIH TLV	OSH	IA PEL		Ontario	European Union
Propanedinitrile,	No data available	TWA: 5	mg/m³ CN		-	
[(3-chlorophenyl)hydrazono]-		(vacated)	WA: 5 mg/m ³			
555-60-2		S*	as CN			
Chemical name	China	Japan Society	of O	EL	Australia	Taiwan
		Occupational Hea	alth			
Propanedinitrile,	=	=	TWA:	5 mg/m³	-	TWA: 5 mg/m ³
[(3-chlorophenyl)hydrazono]-			SI	kin* ¯		STEL: 10 mg/m ³
555-60-2						Skin*

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Skin and body protectionWear 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 Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. 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.

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

pH No information available
Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation rate
No information available

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 solvents No information available

Revision date 19-Nov-2021

Partition 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 Excessive heat.

Incompatible materials

Incompatible materialsNone 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. Toxic by inhalation. (based

on components).

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. Causes mild skin irritation.

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

Symptoms Coughing and/ or wheezing. Difficulty in breathing. Prolonged contact may cause redness

and irritation.

Acute toxicity

Numerical measures of toxicity

Oral LD50 No information available

Dermal 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) 5,942.60 mg/kg
ATEmix (dermal) 17,216.60 mg/kg
ATEmix (inhalation-dust/mist) 0.501 mg/l

Component Information

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

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

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

Persistence and degradability

No information available.

Bioaccumulative potential

There is no data for this product.

Mobility

Mobility in soilNo information available.MobilityNo information available.

Other adverse effects

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disrupters - Evaluated Substances	Endocrine disrupting potential
Propanedinitrile, [(3-chlorophenyl)hydrazono]-	Group III Chemical	-	-

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 No information available

Annex II of MARPOL and the IBC

Code

<u>IATA</u> 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 19-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

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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 18-Mar-2022 Revision Number 1

1. IDENTIFICATION

Product identifier

Product Name 5,5',6,6'-TETRACHLORO-1,1',3,3'-TETRAETHYLBENZIMIDAZOLOCARBOCYANINE

IDODIDE - #20291

Other means of identification

Safety data sheet number 20291

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
86-87, Udyog Vihar Phase IV Gurgaon

USA Kidlington 122005

Oxford Haryana India
OX5 1GE

United Kingdom Bio-Rad Laboratories (Pty) Ltd.

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antibody_safetydatasheets@bio-rad.com Parkwood, Johannesburg 2193

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

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

GHS / BE Page 16/22

Chemical name

1H-Benzimidazolium,

5,6-dichloro-2-[3-(5,6-dichloro-1,3-diethyl-1,3-dihydro-2H-benzimidazol-2-ylidene)-1-propen-1-yl]-1,3-diethyl-, iodide (1:1)

3520-43-2

CAS No

3520-43-2

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 contactRinse 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 aiderNo 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

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.

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 protectionNo 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

Appearancepowder or cake, lyophilisedOdourNo information availableColourredOdour thresholdNo information available

Property Values Remarks • Method

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

Evaporation rate No information available Flammability (solid, gas) No information available

Upper/lower flammability or explosive limits

Upper flammability or explosive

limits

Lower flammability or explosive Not applicable

limits

Vapour pressureNo information availableVapour densityNo information availableRelative densityNo information available

Solubility(ies)

Water solubility

Insoluble

Not applicable

Solubility in other solvents
Partition coefficient
Autoignition temperature
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 None.

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 materialsNone 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.

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 No information available.

Acute toxicity

Numerical measures of toxicity

Oral LD50No information availableDermal 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/irritationNo 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 exposureNo 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.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

IMDG Not regulated

Transport in bulk according to No information available Annex II of MARPOL and the IBC

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 18-Mar-2022

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