



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-Jun-2021

Revision Number 1

1. IDENTIFICATION

Product identifier

Product Name Lyphocheck Urine Metals Control, Level 2

Other means of identification

Catalogue Number(s) 405

Registration Number(s) No information available

Recommended use of the chemical and restrictions on use

Recommended use In vitro diagnostic

Supplier's details

Corporate Headquarters

Bio-Rad Laboratories Inc.
1000 Alfred Nobel Drive
Hercules, CA 94547
USA

Manufacturer

Bio-Rad Laboratories Inc.
9500 Jeronimo Road
Irvine, California 92618
USA

Legal Entity / Contact Address

Bio-Rad Laboratories Pvt. Ltd.
Bio-Rad House
86-87, Udyog Vihar Phase IV Gurgaon
122005
Haryana India

Bio-Rad Laboratories (Pty) Ltd.
34 Bolton Road
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

Acute toxicity - Oral	Category 5
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Germ cell mutagenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

GHS Label elements, including precautionary statements



Signal word



Danger

**Hazard statements**

May be harmful if swallowed
 Causes skin irritation
 Causes serious eye damage
 Suspected of causing genetic defects
 May cause respiratory irritation
 Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Avoid release to the environment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTRE or doctor

Skin

IF ON SKIN: Wash with plenty of water and soap
 If skin irritation occurs: Get medical advice/attention
 Take off all contaminated clothing and wash it before reuse

Inhalation

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

Spill

Collect spillage

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-%
Trichloroacetic acid 76-03-9	76-03-9	3.589
Phenol 108-95-2	108-95-2	1.196

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	Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Eye contact	Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

For emergency responders

Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).
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Most important symptoms and effects, both acute and delayed

Symptoms	Burning sensation.
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Indication of immediate medical attention and special treatment needed, if necessary

Note to physicians	Treat symptomatically.
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5. FIREFIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
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Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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Specific hazards arising from the chemical

Specific hazards arising from the chemical	No information available.
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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.
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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas.
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Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so.
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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	Clean contaminated surface thoroughly.
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 eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.
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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.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL		Ontario	European Union
Trichloroacetic acid 76-03-9	TWA: 0.5 ppm	(vacated) TWA: 1 ppm (vacated) TWA: 7 mg/m³		TWA: 0.5 ppm	-
Phenol 108-95-2	TWA: 5 ppm S*	TWA: 5 ppm TWA: 19 mg/m³ (vacated) TWA: 5 ppm (vacated) TWA: 19 mg/m³ (vacated) S* S*		TWA: 5 ppm Skin	TWA: 2 ppm TWA: 8 mg/m³ STEL: 4 ppm STEL: 16 mg/m³ *
Chemical name	China	Japan Society of Occupational Health	Korea	Australia	Taiwan
Trichloroacetic acid 76-03-9	-	-	TWA: 1 ppm	1 ppm 6.7 mg/m³	TWA: 1 ppm TWA: 6.7 mg/m³ STEL: 2 ppm STEL: 13.4 mg/m³
Phenol 108-95-2	TWA: 10 mg/m³ STEL: 20 mg/m³ Skin*	TWA: 5 ppm TWA: 19 mg/m³ S*	TWA: 5 ppm Skin*	1 ppm 4 mg/m³	TWA: 5 ppm TWA: 19 mg/m³ STEL: 28.5 mg/m³ STEL: 10 ppm Skin*

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
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Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
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Skin and body protection	Wear suitable protective clothing.
Hand protection	Wear suitable gloves. Impervious 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. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid	Odour	Slight
Appearance	powder or cake, lyophilised	Odour threshold	No information available
Colour	yellow		
Property	Values	Remarks • Method	
pH	5		
Melting point / freezing point		No information available	
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 limits	Not applicable		
Lower flammability or explosive limits	Not applicable		
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		No information available	
Partition coefficient		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity			
Kinematic viscosity		No information available	
Dynamic viscosity			

Other information

Oxidising properties	Not applicable
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10. STABILITY AND REACTIVITY

Reactivity

Reactivity	No information available.
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Chemical stability

Stability	Stable under normal conditions.
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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 materials** Strong acids. Strong bases. Strong oxidizing agents.**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. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes. (based on components).
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.
Symptoms	Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

Acute toxicity**Numerical measures of toxicity**

67.999 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 67.999 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 72.784 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
 72.784 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 71.588 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

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

ATEmix (oral)	2,453.90 mg/kg
ATEmix (dermal)	8,669.70 mg/kg
ATEmix (inhalation-dust/mist)	11.90 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trichloroacetic acid	= 3320 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Phenol	= 340 mg/kg (Rat) = 317 mg/kg (Rat)	= 630 mg/kg (Rabbit)	= 316 mg/m ³ (Rat) 4 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. Irritating to skin.
Serious eye damage/irritation	Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects.
Carcinogenicity	No information available.

Chemical name	IARC
Trichloroacetic acid	Group 2B
Phenol	Group 3

Reproductive toxicity	No information available.
STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	No information available.
Target organ effects	Liver, Kidney, Respiratory system, Eyes, Skin, 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 Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Phenol	EC50: 0.0188 - 0.1044mg/L (96h, <i>Pseudokirchneriella subcapitata</i>) EC50: 187 - 279mg/L (72h, <i>Desmodesmus subspicatus</i>) EC50: =46.42mg/L (96h, <i>Pseudokirchneriella subcapitata</i>)	LC50: 11.9 - 25.3mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 11.9 - 50.5mg/L (96h, <i>Pimephales promelas</i>) LC50: 20.5 - 25.6mg/L (96h, <i>Pimephales promelas</i>) LC50: 23.4 - 36.6mg/L (96h, <i>Oryzias latipes</i>) LC50: 33.9 - 43.3mg/L (96h, <i>Oryzias latipes</i>) LC50: 34.09 - 47.64mg/L (96h, <i>Poecilia reticulata</i>) LC50: 4.23 - 7.49mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 5.0 - 12.0mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 5.449 - 6.789mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 7.5 - 14mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =0.00175mg/L (96h, <i>Cyprinus carpio</i>) LC50: =11.5mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =13.5mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =27.8mg/L (96h, <i>Brachydanio rerio</i>) LC50: =31mg/L (96h, <i>Poecilia</i>)	EC50: 10.2 - 15.5mg/L (48h, <i>Daphnia magna</i>) EC50: 4.24 - 10.7mg/L (48h, <i>Daphnia magna</i>)

		<i>reticulata</i> LC50: =32mg/L (96h, <i>Pimephales</i> <i>promelas</i>)	
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Persistence and degradability

No information available.

Bioaccumulative potential

There is no data for this product.

Mobility**Mobility in soil** No information available.**Mobility** No information available.

Chemical name	Partition coefficient
Phenol	1.5

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
UN number or ID number 1759
Packing group III

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

The Rotterdam Convention

International Inventories

Contact supplier for inventory compliance status

16. OTHER INFORMATION

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 11-Jun-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