KIT SAFETY DATA SHEET



Kit Product Name Genscreen ULTRA HIV Ag-Ab (480 tests)

Kit Catalogue Number(s) 72388

Revision date 06-Aug-2024

Kit Contents

Catalogue Number(s)	Product Name
7361E,7360T, 7361J	R2 - 20 x Conc. Washing Solution, 235 ml
7360G, 5180S, 7435S	R8 - Substrat Buffer, 60 mL
7360J, 5180U, 7361H, 7337Z	R10 - Stopping Solution, 28 mL
7436L, 7436H	R9 - Chromogen: TMB Solution (11x), 5 mL
7286A	R1 - Microplate, 12 x 8 wells
7286B	R3 - Negative Control, 2.5 ml
7286C	R4 - HIV Ab positive control, 1 ml
7286D	R5 - HIV Ag positive control, 1 ml
7286E	R6 - Conjugate 1, 10 ml
7288F, 7338F	R7a - Conjugate 2 (lyoph.), q.s. ad, 30 ml
7288G, 7338G	R7b - Conjugate 2 Diluent, 30 ml

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 06-Aug-2024 **Revision Number** 1.6

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R2 - 20 x Conc. Washing Solution, 235 ml

Catalogue Number(s) 7361E,7360T, 7361J

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Restricted to professional users

In vitro diagnostic

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters Manufacturer Bio-Rad Laboratories Inc.

1000 Alfred Nobel Drive Hercules, CA 94547

USA

Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

00800 00246 723 **Technical Service**

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

> CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation Category 3 - (H316)

2.2. Label elements

Signal word

Warning

Hazard statements

H316 - Causes mild skin irritation

EUH208 - Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone May produce an allergic reaction.

Precautionary Statements - EU (§28, 1272/2008)

P332 + P313 - If skin irritation occurs: Get medical advice/attention

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
	ŭ	number	,	to Regulation (EC) No. 1272/2008 [CLP]	concentration limit (SCL)		(long-term)
Sodium chloride 7647-14-5	20 - 35	Not available	231-598-3	Not classified	-	-	1
Hydrochloric acid 7647-01-0	0.3 - 0.99	Not available	231-595-7 (017-002-00 -2)	Skin Corr. 1B (H314) Eye Irrit. 2 (H319) STOT SE 3 (H335)	Eye Irrit. 2 :: 1%<=C<3% Skin Corr. 1B :: C>=5% Skin Irrit. 2 :: 1%<=C<5% STOT SE 3 :: C>=10%	-	-
5-Chloro-2-methyl-3 (2H)-isothiazolone, mixture with 2-methyl-3(2H)-isoth iazolone 55965-84-9	0.01	Not available	(613-167-00 -5)	Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317)	Eye Irrit. 2 :: 0.06%<=C<0.6 % Skin Corr. 1C :: C>=0.6% Skin Irrit. 2 :: 0.06%<=C<0.6 % Skin Sens. 1A :: C>=0.0015% Eye Dam. 1 ::		100

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- 1			C: 0.00/	l
- 1			U>=U.6%	i

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Sodium chloride 7647-14-5	3550	10000	No data available	No data available	No data available
Hydrochloric acid 7647-01-0	238	5010	No data available	No data available	563.3022
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9		87.12	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of 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 doctor.

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

doctor.

Ingestion Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Prolonged contact may cause redness and irritation.

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1. 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.

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5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning upTake up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

Reference to other sectionsSee section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name European Union Austria Belgium Bulgaria Croatia

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Hydrochloric acid 7647-01-0	TW STI	VA: 5 ppm A: 8 mg/m³ EL: 10 ppm L: 15 mg/m³	TWA: 5 ppm TWA: 8 mg/m ³ STEL 10 ppm STEL 15 mg/m ³	TWA: 5 ppm TWA: 8 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³	STEL: 1 TWA	: 10 ppm 5.0 mg/m ³ :: 5 ppm 3.0 mg/m ³	TWA: 5 ppm TWA: 8 mg/m³ STEL: 10 ppm STEL: 15 mg/m³
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9		-	TWA: 0.05 mg/m³ Sh+	-		-	-
Chemical name		Cyprus	Czech Republic	Denmark	Es	stonia	Finland
Hydrochloric acid 7647-01-0	STE TV TW	EL: 10 ppm L: 15 mg/m³ VA: 5 ppm A: 8 mg/m³	TWA: 8 mg/m ³ Ceiling: 15 mg/m ³	STEL: 5 ppm STEL: 8 mg/m ³	TWA: STEL STEL:	: 5 ppm 8 mg/m³ : 10 ppm 15 mg/m³	STEL: 5 ppm STEL: 7.6 mg/m ³
Chemical name		France	Germany TRGS	Germany DFG		reece	Hungary
Hydrochloric acid 7647-01-0		EL: 5 ppm _: 7.6 mg/m³	TWA: 2 ppm TWA: 3 mg/m³	TWA: 2 ppm TWA: 3.0 mg/m ³ Peak: 4 ppm Peak: 6 mg/m ³	TWA: STEL	a: 5 ppm 7 mg/m ³ a: 5 ppm a 7 mg/m ³	TWA: 8 mg/m ³ TWA: 5 ppm STEL: 165 mg/m ³ STEL: 10 ppm
Chemical name		Ireland	Italy MDLPS	Italy AIDII	L	atvia	Lithuania
Sodium chloride 7647-14-5		-	-	-		5 mg/m ³	TWA: 5 mg/m ³
Hydrochloric acid 7647-01-0	TV STI	A: 8 mg/m ³ VA: 5 ppm EL: 10 ppm L: 15 mg/m ³	TWA: 5 ppm TWA: 8 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³	Ceiling: 2 ppm Ceiling: 2.9 mg/m ³	TWA: STEL	: 5 ppm 8 mg/m ³ : 10 ppm 15 mg/m ³	TWA: 5 ppm TWA: 8 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³
Chemical name		xembourg	Malta	Netherlands		orway	Poland
Hydrochloric acid 7647-01-0	STE TV	EL: 10 ppm L: 15 mg/m ³ VA: 5 ppm A: 8 mg/m ³	STEL: 10 ppm STEL: 15 mg/m ³ TWA: 5 ppm TWA: 8 mg/m ³	TWA: 5 ppm TWA: 8 mg/m ³ STEL: 10 ppm STEL: 15 mg/m ³		g: 5 ppm : 7 mg/m³	STEL: 10 mg/m ³ TWA: 5 mg/m ³
Chemical name		Portugal	Romania	Slovakia		venia	Spain
Hydrochloric acid 7647-01-0	TW STI STE	VA: 5 ppm A: 8 mg/m³ EL: 10 ppm L: 15 mg/m³ ling: 2 ppm	TWA: 5 ppm TWA: 8 mg/m³ STEL: 10 ppm STEL: 15 mg/m³	TWA: 5 ppm TWA: 8.0 mg/m ³ Ceiling: 15 mg/m ³	TWA: STEL	: 5 ppm 8 mg/m³ : 10 ppm 15 mg/m³	TWA: 5 ppm TWA: 7.6 mg/m³ STEL: 10 ppm STEL: 15 mg/m³
Chemical name		Sı	weden	Switzerland			ted Kingdom
Hydrochloric acid 7647-01-0		NGV: Bindande	/: 2 ppm : 3 mg/m³ : KGV: 4 ppm KGV: 6 mg/m³	TWA: 2 ppm TWA: 3 mg/m ³ STEL: 4 ppm STEL: 6 mg/m ³		TV S	WA: 1 ppm VA: 2 mg/m ³ FEL: 5 ppm EL: 8 mg/m ³
5-Chloro-2-methyl-3(2H)-isothia zolone, mixture with 2-methyl-3(2H)-isothiazolone 55965-84-9			-	S+ TWA: 0.2 mg/m STEL: 0.4 mg/n	1 ³		-

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

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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.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Colour colourless
Odour Odourless.

Odour threshold No information available

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

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash pointNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

pH No data available

pH (as aqueous solution) No data available No information available

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Water solubilityMiscible in waterSolubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Relative density

Bulk density

Liquid Density

No data available

No data available

No data available

Relative vapour density

No data available

None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

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10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoidNone known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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. Causes mild skin irritation.

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) 11,155.50 mg/kg ATEmix (dermal) 206,611.60 mg/kg

Component Information

Chemical name	Chemical name Oral LD50		Inhalation LC50
Sodium chloride	= 3550 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat)1 h
Hydrochloric acid	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h

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5-Chloro-2-methyl-3(2H)-isothia	= 53 mg/kg (Rat)	= 87.12 mg/kg (Rabbit)	-
zolone, mixture with			
2-methyl-3(2H)-isothiazolone			

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 No information available.

Respiratory or skin sensitisation 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.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium chloride	-	LC50: 5560 - 6080mg/L	-	EC50: =1000mg/L (48h,
		(96h, Lepomis		Daphnia magna)
		macrochirus)		EC50: 340.7 - 469.2mg/L
		LC50: =12946mg/L (96h,		(48h, Daphnia magna)
		Lepomis macrochirus)		
		LC50: 6020 - 7070mg/L		
		(96h, Pimephales		
		promelas)		
		LC50: =7050mg/L (96h,		

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	Pimephales promelas)	
	LC50: 6420 - 6700mg/L	
	(96h, Pimephales	
	promelas)	
	LC50: 4747 - 7824mg/L	
	(96h, Oncorhynchus	
	mykiss)	

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Component information							
Chemical name	Partition coefficient						
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	0.7						
2-methyl-3(2H)-isothiazolone							

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Sodium chloride	The substance is not PBT / vPvB
Hydrochloric acid	The substance is not PBT / vPvB
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

IATA

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated

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14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions

14.7 Maritime transport in bulk No information available

according to IMO instruments

RID

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

ADR

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Sodium chloride	RG 78	-
7647-14-5		

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

	Chemical name	Restricted substance per REACH	Substance subject to authorisation per
		Annex XVII	REACH Annex XIV
Г	Hydrochloric acid - 7647-01-0	Use restricted. See entry 75.	-
5	-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	Use restricted. See entry 75.	-
	2-methyl-3(2H)-isothiazolone - 55965-84-9		

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Persistent Organic Pollutants

Not applicable

Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Hydrochloric acid - 7647-01-0	25	250

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Plant Protection Products (1107/2009/EC)

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Sodium chloride - 7647-14-5	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Sodium chloride - 7647-14-5	Product-type 1: Human hygiene
Hydrochloric acid - 7647-01-0	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals
2-methyl-3(2H)-isothiazolone - 55965-84-9	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4: Food and feed area Product-type 6: Preservatives for products during storage Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimicides Product-type 13: Working or cutting fluid preservatives

<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H331 - Toxic if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure					
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used				
Acute oral toxicity	Calculation method				
Acute dermal toxicity	Calculation method				
Acute inhalation toxicity - gas	Calculation method				
Acute inhalation toxicity - vapour	Calculation method				
Acute inhalation toxicity - dust/mist	Calculation method				
Skin corrosion/irritation	Calculation method				
Serious eye damage/eye irritation	Calculation method				
Respiratory sensitisation	Calculation method				
Skin sensitisation	Calculation method				
Mutagenicity	Calculation method				
Carcinogenicity	Calculation method				
Reproductive toxicity	Calculation method				
STOT - single exposure	Calculation method				
STOT - repeated exposure	Calculation method				
Acute aquatic toxicity	Calculation method				
Chronic aquatic toxicity	Calculation method				
Aspiration hazard	Calculation method				
Ozone	Calculation method				
Health hazards not otherwise classified (HHNOC)	Calculation method				

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA RAC)

European Chemicals Agency (ECHA) (ECHA_API)

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)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 06-Aug-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 30-May-2024 Revision Number 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R10 - Stopping Solution, 28 mL

Catalogue Number(s) 7360J, 5180U, 7361H, 7337Z

Nanoforms Not applicable

Unique Formula Identifier (UFI) LIZB

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In vitro diagnostic

Restricted to professional users

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

<u>Corporate Headquarters</u> Bio-Rad Laboratories Inc.

1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141

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CHEMTREC South Africa: 0-800-983-611

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation Category 1 - (H314)

2.2. Label elements



Signal word Danger

Hazard statements

H314 - Causes severe skin burns and eye damage

Precautionary Statements - EU (§28, 1272/2008)

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower] P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

P280 - Wear protective gloves/protective clothing/eye protection/face protection

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

	Chemical name	Weight-%			Classification according		M-Factor	M-Factor
١			number	Index No)	to Regulation (EC) No. 1272/2008 [CLP]	concentration limit (SCL)		(long-term)
ſ	Sulfuric acid	2.5 - 5	Not available	231-639-5	Skin Corr. 1A (H314)	Eye Dam. 1 ::	-	-
	7664-93-9			(016-020-00	Eye Dam. 1 (H318)	>=3%		
1				-8)		Eye Irrit. 2 ::		
						1%<=C<3%		
						Skin Corr. 1 ::		
						C>=5%		
						Skin Irrit. 2 ::		
1						1%<=C<5%		

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Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
		mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
Sulfuric acid	2140	No data available	0.375	No data available	No data available
7664-93-9					

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of 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. 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.

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

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

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

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

and shoes. Get immediate medical attention.

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

person. Get immediate medical attention.

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.

Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. 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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

surrounding environment.

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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.

5.2. Special hazards arising from the substance or mixture

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 vapours.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

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

6.2. 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.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning upTake up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. 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. 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 it before

reuse.

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.

7.2. Conditions for safe storage, including any incompatibilities

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Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials. Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	Euro	pean Union	Austria	Belgium	Bu	Igaria	Croatia
Sulfuric acid 7664-93-9	TWA	: 0.05 mg/m ³	TWA: 0.1 mg/m ³ STEL 0.2 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0	.05 mg/m ³	TWA: 0.05 mg/m ³
Chemical name		Cyprus	Czech Republic	Denmark	Es	stonia	Finland
Sulfuric acid	TWA	: 0.05 mg/m ³	TWA: 1 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0	.05 mg/m ³	TWA: 0.05 mg/m ³
7664-93-9			TWA: 0.05 mg/m ³	STEL: 0.1 mg/m ³			STEL: 0.1 mg/m ³
			Ceiling: 2 mg/m ³	thoracic fraction			
Chemical name		France	Germany TRGS	Germany DFG	Gı	reece	Hungary
Sulfuric acid	TWA	: 0.05 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0	.05 mg/m ³	TWA: 0.05 mg/m ³
7664-93-9	STE	EL: 3 mg/m ³		Peak: 0.1 mg/m ³			
Chemical name		Ireland	Italy MDLPS	Italy AIDII	L	atvia	Lithuania
Sulfuric acid	TW	A: 0.05 ppm	TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0	.05 mg/m ³	TWA: 0.05 mg/m ³
7664-93-9	STE	L: 0.15 ppm					STEL: 3 mg/m ³
Chemical name	Lu	xembourg	Malta	Netherlands	No	orway	Poland
Sulfuric acid	TWA	: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: (0.1 mg/m ³	TWA: 0.05 mg/m ³
7664-93-9					STEL:	0.3 mg/m ³	
Chemical name		Portugal	Romania	Slovakia	Slo	venia	Spain
Sulfuric acid	TWA	A: 0.2 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0	.05 mg/m ³	TWA: 0.05 mg/m ³
7664-93-9					STEL: (0.05 mg/m ³	
Chemical name		Sı	weden	Switzerland		Uni	ted Kingdom
Sulfuric acid		NGV:	0.1 mg/m ³	TWA: 0.1 mg/m		TWA	A: 0.05 mg/m ³
		KGV: 0.2 mg/m ³	STEL: 0.2 mg/n	1 ³	STE	L: 0.15 mg/m ³	

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

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

Hand protection Wear suitable gloves. Impervious gloves.

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

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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 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.

None known

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution colourless
Odour Low.

Odour threshold No information available

Property Values Remarks • Method

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash pointNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

pH < 2

pH (as aqueous solution)

No data available

No information available

No data available

None known

Dynamic viscosity

No data available

No data available

Water solubility
Solubility(ies)
Miscible in water
No data available

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Bulk density
No data available
Liquid Density
No data available

Relative vapour density

No data available

None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidising agent.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on 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.

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.

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

components). Causes burns.

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 related to the physical, chemical and toxicological characteristics

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

Acute toxicity

Numerical measures of toxicity

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No information available

Component Information

Г	Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
	Sulfuric acid	= 2140 mg/kg (Rat)	-	= 0.375 mg/L (Rat) 4 h

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes severe skin burns and eye

damage.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye damage.

Respiratory or skin sensitisation 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.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sulfuric acid	-	LC50: >500mg/L (96h,	-	-
		Brachydanio rerio)		

12.2. Persistence and degradability

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Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment	
Sulfuric acid	The substance is not PBT / vPvB	

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

IATA

14.1 UN number or ID number UN2796

14.2 UN proper shipping name Sulphuric acid solution

14.3 Transport hazard class(es)14.4 Packing group

Description UN2796, Sulphuric acid solution, 8, II

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1 UN number or ID number UN2796

14.2 UN proper shipping name SULPHURIC ACID SOLUTION

14.3 Transport hazard class(es) 814.4 Packing group | | |

Description UN2796, SULPHURIC ACID SOLUTION, 8, II

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions None EmS-No. F-A, S-B

14.7 Maritime transport in bulk according to IMO instruments

No information available

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RID

14.1 UN number or ID number UN2796

14.2 UN proper shipping name SULPHURIC ACID SOLUTION

14.3 Transport hazard class(es) 8
14.4 Packing group

Description UN2796, SULPHURIC ACID SOLUTION, 8, II

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions None **Classification code** C1

<u>ADR</u>

14.1 UN number or ID number 2796

14.2 UN proper shipping name SULPHURIC ACID SOLUTION

14.3 Transport hazard class(es) 8
14.4 Packing group ||

Description 2796, SULPHURIC ACID SOLUTION, 8, II

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions None
Classification code C1
Tunnel restriction code (E)

SECTION 15: Regulatory information

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

National regulations

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

Netherlands

Chemical name	Netherlands - List of	Netherlands - List of	Netherlands - List of
	Carcinogens	Mutagens	Reproductive Toxins
Sulfuric acid	Present	-	-

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Sulfuric acid - 7664-93-9	Use restricted. See entry 75.	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

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<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

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)

National Institute of Technology and Evaluation (NITE)

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Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 30-May-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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.

Revision date 30-May-2024

End of Safety Data Sheet

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 06-Aug-2024 Revision Number 1.4

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R9 - Chromogen: TMB Solution (11x), 5 mL

Catalogue Number(s) 7436L, 7436H

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended useRestricted to professional users

In vitro diagnostic

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

Rio Rad Laboratorios Inc.

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

USA

Manufacturer Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation Category 1 - (H314)

2.2. Label elements



Signal word Danger

Hazard statements

H314 - Causes severe skin burns and eye damage

Precautionary Statements - EU (§28, 1272/2008)

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower] P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

P280 - Wear protective gloves/protective clothing/eye protection/face protection

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
		number	Index No)	to Regulation (EC) No.	concentration		(long-term)
				1272/2008 [CLP]	limit (SCL)		
Hydrochloric acid	0.3 - 0.99	Not available	231-595-7	Skin Corr. 1B (H314)	Eye Irrit. 2 ::	-	-
7647-01-0			(017-002-00	Eye Irrit. 2 (H319)	1%<=C<3%		
			-2)	STOT SE 3 (H335)	Skin Corr. 1B ::		
					C>=5%		
					Skin Irrit. 2 ::		
					1%<=C<5%		
					STOT SE 3 ::		
					C>=10%		

Full text of H- and EUH-phrases: see section 16

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Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Hydrochloric acid 7647-01-0	238	5010	No data available	No data available	563.3022

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of 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. 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.

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

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

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

Skin contactWash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Get immediate medical attention.

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

person. Get immediate medical attention.

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. Ávoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. 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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

surrounding environment.

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.

5.2. Special hazards arising from the substance or mixture

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 vapours.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

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

6.2. 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.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning upTake up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. 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. 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 it before

reuse.

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.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

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moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	Euro	pean Union	Austria	Belgium	Bu	lgaria	Croatia
Hydrochloric acid	TV	VA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm		: 10 ppm	TWA: 5 ppm
7647-01-0	TWA: 8 mg/m ³		TWA: 8 mg/m ³	TWA: 8 mg/m ³	STEL: 1	5.0 mg/m ³	TWA: 8 mg/m ³
		EL: 10 ppm	STEL 10 ppm	STEL: 10 ppm	TWA	: 5 ppm	STEL: 10 ppm
	STE	L: 15 mg/m ³	STEL 15 mg/m ³	STEL: 15 mg/m ³	TWA: 8	3.0 mg/m ³	STEL: 15 mg/m ³
Chemical name		Cyprus	Czech Republic	Denmark	Es	tonia	Finland
Hydrochloric acid	STE	EL: 10 ppm	TWA: 8 mg/m ³	STEL: 5 ppm	TWA	: 5 ppm	STEL: 5 ppm
7647-01-0	STE	L: 15 mg/m³	Ceiling: 15 mg/m ³	STEL: 8 mg/m ³		8 mg/m ³	STEL: 7.6 mg/m ³
	TV	VA: 5 ppm			STEL	: 10 ppm	
	TW	A: 8 mg/m ³			STEL:	15 mg/m ³	
Chemical name		France	Germany TRGS	Germany DFG	Gr	eece	Hungary
Hydrochloric acid	ST	EL: 5 ppm	TWA: 2 ppm	TWA: 2 ppm	TWA	: 5 ppm	TWA: 8 mg/m ³
7647-01-0	STEL	_: 7.6 mg/m³	TWA: 3 mg/m ³	TWA: 3.0 mg/m ³	TWA:	7 mg/m ³	TWA: 5 ppm
				Peak: 4 ppm	STEL	_: 5 ppm	STEL: 165 mg/m ³
				Peak: 6 mg/m ³	STEL:	7 mg/m ³	STEL: 10 ppm
Chemical name		Ireland	Italy MDLPS	Italy AIDII	La	atvia	Lithuania
Hydrochloric acid		A: 8 mg/m ³	TWA: 5 ppm	Ceiling: 2 ppm	TWA	: 5 ppm	TWA: 5 ppm
7647-01-0	TV	/A: 5 ppm	TWA: 8 mg/m ³	Ceiling: 2.9 mg/m ³	TWA:	8 mg/m ³	TWA: 8 mg/m ³
	STE	EL: 10 ppm	STEL: 10 ppm			: 10 ppm	STEL: 10 ppm
	STE	L: 15 mg/m ³	STEL: 15 mg/m ³		STEL:	15 mg/m ³	STEL: 15 mg/m ³
Chemical name	Lu	xembourg	Malta	Netherlands	Norway		Poland
Hydrochloric acid	STEL: 10 ppm		STEL: 10 ppm	TWA: 5 ppm	Ceiling: 5 ppm		STEL: 10 mg/m ³
7647-01-0	STEL: 15 mg/m ³		STEL: 15 mg/m ³	TWA: 8 mg/m ³	Ceiling: 7 mg/m ³		TWA: 5 mg/m ³
	TWA: 5 ppm		TWA: 5 ppm	STEL: 10 ppm			
	TWA: 8 mg/m ³		TWA: 8 mg/m ³	STEL: 15 mg/m ³			
Chemical name		Portugal	Romania	Slovakia	Slo	venia	Spain
Hydrochloric acid		/A: 5 ppm	TWA: 5 ppm	TWA: 5 ppm		: 5 ppm	TWA: 5 ppm
7647-01-0		A: 8 mg/m ³	TWA: 8 mg/m ³	TWA: 8.0 mg/m ³		8 mg/m ³	TWA: 7.6 mg/m ³
		EL: 10 ppm	STEL: 10 ppm	Ceiling: 15 mg/m ³		: 10 ppm	STEL: 10 ppm
		L: 15 mg/m ³	STEL: 15 mg/m ³		STEL:	15 mg/m ³	STEL: 15 mg/m ³
	Cei	ling: 2 ppm					
Chemical name	Sweden			Switzerland			ted Kingdom
Hydrochloric acid	d NGV		/: 2 ppm	TWA: 2 ppm			WA: 1 ppm
7647-01-0			: 3 mg/m ³	TWA: 3 mg/m ³			VA: 2 mg/m³
			KGV: 4 ppm	STEL: 4 ppm			ΓEL: 5 ppm
	Bindande KGV: 6 r		KGV: 6 mg/m ³	STEL: 6 mg/m ²	3	L ST	EL: 8 mg/m ³

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available. No information available.

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8.2. Exposure controls

Personal protective equipment

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

Hand protection Wear suitable gloves. Impervious gloves.

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

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. 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.

> > None known

No information available. **Environmental exposure controls**

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid **Appearance** Liquid Colour pink Odour Low.

Odour threshold No information available

Property Values Remarks • Method

No data available None known Melting point / freezing point Initial boiling point and boiling rangeNo data available None known Flammability No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

No data available Lower flammability or explosive

limits

Flash point No data available None known

Autoignition temperature 363 °C

Decomposition temperature

pН

No data available

No data available No information available pH (as aqueous solution) No data available None known Kinematic viscosity

Dynamic viscosity No data available None known Miscible in water

Water solubility No data available Solubility(ies) None known No data available Partition coefficient None known Vapour pressure No data available None known Relative density No data available None known

Bulk density No data available **Liquid Density** No data available

Relative vapour density No data available None known

Particle characteristics

Particle Size No information available **Particle Size Distribution** No information available

9.2. Other information

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9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidising agent.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on 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.

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.

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

components). Causes burns.

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

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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 related to the physical, chemical and toxicological characteristics

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

Acute toxicity

Numerical measures of toxicity

No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid	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/irritation Classification based on data available for ingredients. Causes severe skin burns and eye

damage.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye damage.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

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12.1. Toxicity

EcotoxicityThe environmental impact of this product has not been fully investigated.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
Hydrochloric acid	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

<u>IATA</u>

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

Not regulated

Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

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14.6 Special precautions for user

Special Provisions

14.7 Maritime transport in bulk No information available

according to IMO instruments

14.1 UN number or ID number Not regulated Not regulated 14.2 UN proper shipping name 14.3 Transport hazard class(es) Not regulated 14.4 Packing group Not regulated 14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions

None

ADR

14.1 UN number or ID number Not regulated Not regulated 14.2 UN proper shipping name Not regulated 14.3 Transport hazard class(es) 14.4 Packing group Not regulated 14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions None

SECTION 15: Regulatory information

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

National regulations

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Hydrochloric acid - 7647-01-0	Use restricted. See entry 75.	-

Persistent Organic Pollutants

Not applicable

Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name		Lower-tier requirements (to	ons) Upper-tier requir	rements (tons)
Hydrochloric acid - 764	7-01-0	25	250	0

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Hydrochloric acid - 7647-01-0	Product-type 2: Disinfectants and algaecides not intended
	for direct application to humans or animals

EGHS / BE Page 35 / 121 International Inventories Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

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

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International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 06-Aug-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 16-Apr-2024 Revision Number 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R1 - Microplate, 12 x 8 wells

Catalogue Number(s) 7286A

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended useRestricted to professional users

In vitro diagnostic

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

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

USA

Manufacturer Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

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

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of 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 doctor.

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

doctor.

Ingestion Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

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Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. 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.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and

precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. 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 Take up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

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7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. 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.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

No information available. No information available.

(PNEC)

8.2. Exposure controls

Personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protectionNo special protective equipment required.

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.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateSolidAppearancesolidColourcolourlessOdourOdourless.

Odour threshold No information available

Property Values Remarks • Method

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive

limits

No data available

Lower flammability or explosive No data available

limits

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Flash point No data available None known Autoignition temperature No data available None known Decomposition temperature No data available None known pH No data available None known

pH (as aqueous solution) No data available No information available

Kinematic viscosity

Dynamic viscosity

Water solubility

No data available

No data available

Insoluble in water

No data available

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Bulk density

Liquid Density

No data available

No data available

Relative vapour density

No data available

None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

None known

None known

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoidNone known based on information supplied.

10.5. Incompatible materials

Incompatible materialsNone known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

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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 No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation 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.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

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12.1. Toxicity

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

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

IATA

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special precautions for user

Special Provisions None

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14.7 Maritime transport in bulk No information available according to IMO instruments

RID

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

ADR

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

SECTION 15: Regulatory information

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

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Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure			
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used		
Acute oral toxicity	Calculation method		
Acute dermal toxicity	Calculation method		
Acute inhalation toxicity - gas	Calculation method		
Acute inhalation toxicity - vapour	Calculation method		
Acute inhalation toxicity - dust/mist	Calculation method		
Skin corrosion/irritation	Calculation method		
Serious eye damage/eye irritation	Calculation method		
Respiratory sensitisation	Calculation method		
Skin sensitisation	Calculation method		
Mutagenicity	Calculation method		
Carcinogenicity	Calculation method		
Reproductive toxicity	Calculation method		
STOT - single exposure	Calculation method		
STOT - repeated exposure	Calculation method		
Acute aquatic toxicity	Calculation method		
Chronic aquatic toxicity	Calculation method		
Aspiration hazard	Calculation method		
Ozone	Calculation method		

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

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)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 16-Apr-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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

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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

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 06-Mar-2023 Revision Number 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R3 - Negative Control, 2.5 ml

Catalogue Number(s) 7286B

Nanoforms Not applicable

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In vitro diagnostic

Restricted to professional users

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate HeadquartersManBio-Rad Laboratories Inc.Bio-Inc.

1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available.

Contains human source material and / or potentially infectious components

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

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

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Remove to fresh air.

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

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

Skin contact Wash with soap and water.

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

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

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4.3. Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

5.1. 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 mediaDo not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

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

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

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

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7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. 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.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

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 Follow universal and standard precautions for handling potentially infectious materials.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquidAppearanceLiquidColourlight yellowOdourOdourless.

Odour threshold No information available

Property Values Remarks • Method

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

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Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash point No data available None known No data available **Autoignition temperature** None known

Decomposition temperature

None known No data available None known No information available

pH (as aqueous solution) No data available Kinematic viscosity No data available

Dynamic viscosity No data available

Water solubility Miscible in water No data available Solubility(ies) **Partition coefficient** No data available Vapour pressure No data available Relative density No data available **Bulk density** No data available

No data available **Liquid Density**

Relative vapour density No data available None known

Particle characteristics

Particle Size No information available No information available **Particle Size Distribution**

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge

10.3. Possibility of hazardous reactions

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

Copper, Brass, Lead, and solder in piping systems to form explosive compounds and toxic

None known

None known

None known

None known

None known

None known

gases.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Metals.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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/irritationNo information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation 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.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

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11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Flush pipes with water frequently if discarding solutions

containing Sodium azide into metal piping systems.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

<u>IATA</u>

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated
Not regulated
Not regulated
Not applicable

14.5 Environmental hazards14.6 Special precautions for user

14.6 Special precautions for user

Special Provisions None

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IMDG

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special precautions for user

Special Provisions None

14.7 Maritime transport in bulk No information available

according to IMO instruments

RID

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

Not regulated
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

ADR

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

SECTION 15: Regulatory information

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories Contact supplier for inventory compliance status

15.2. Chemical safety assessment

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Chemical Safety Report No information available

SECTION 16: Other information

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

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

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)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

EGHS / BE Page 56 / 121

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 06-Mar-2023

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 15-Mar-2022 Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R4 - HIV Ab positive control, 1 ml

Catalogue Number(s) 7286C

Nanoforms Not applicable

Pure substance/mixture Mixture

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In vitro diagnostic

Restricted to professional users

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

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

USA

Manufacturer Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141

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CHEMTREC South Africa: 0-800-983-611

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation	Category 1 - (H317)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone



Signal word Warning

Hazard statements

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P273 - Avoid release to the environment

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

P280 - Wear protective gloves/protective clothing/eye protection/face protection

2.3. Other hazards

Contains animal source material. (Cattle).

Contains human source material and / or potentially infectious components

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	,	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
1,2,3-Propanetriol 56-81-5	10 - 20	Not available	200-289-5	Not classified	-	-	-
5-Chloro-2-methyl-3 (2H)-isothiazolone, mixture with 2-methyl-3(2H)-isoth	0.01	Not available	(613-167-00 -5)	,	Eye Irrit. 2 :: 0.06%<=C<0.6 % Skin Corr. 1C ::		100

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iazolone	Eye Dam. 1 (H	I318) C>=0.6%	
55965-84-9	Skin Sens. 1A (H317) Skin Irrit. 2 ::	
	(EUH071)	0.06%<=C<0.6	
	Aquatic Acute 1	(H400) %	
	Aquatic Chror	nic 1 Skin Sens. 1A	
	(H410)	:: C>=0.0015%	
		Eye Dam. 1 ::	
		C>=0.6%	

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
1,2,3-Propanetriol 56-81-5	12600	10000	2.75	No data available	No data available
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9		87.12	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

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

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

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a doctor.

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

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctorsMay cause sensitisation in susceptible persons. Treat symptomatically. Contains human

source material and / or potentially infectious components.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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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.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

Product is or contains a sensitiser. May cause sensitisation by skin contact.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning upUse:. Disinfectant. Clean contaminated surface thoroughly.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. 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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

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

7.2. Conditions for safe storage, including any incompatibilities

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

product and label instructions.

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7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
1,2,3-Propanetriol	-	-	TWA: 10 mg/m ³	-	TWA: 10 mg/m ³
56-81-5					
5-Chloro-2-methyl-3(2H)-i	-	TWA: 0.05 mg/m ³	-	-	-
sothiazolone, mixture with		Sh+			
2-methyl-3(2H)-isothiazol					
one					
55965-84-9					
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
1,2,3-Propanetriol	-	TWA: 10 mg/m ³	-	TWA: 10 mg/m ³	TWA: 20 mg/m ³
56-81-5		Ceiling: 15 mg/m ³			
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
1,2,3-Propanetriol	TWA: 10 mg/m ³	TWA: 200 mg/m ³	TWA: 200 mg/m ³	TWA: 10 mg/m ³	-
56-81-5			Peak: 400 mg/m ³		
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
1,2,3-Propanetriol	-	-	-	-	TWA: 10 mg/m ³
56-81-5					
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
1,2,3-Propanetriol	TWA: 10 mg/m ³	-	TWA: 11 mg/m ³	TWA: 200 mg/m ³	TWA: 10 mg/m ³
56-81-5				STEL: 400 mg/m ³	
Chemical name	S	weden	Switzerland	Un	ited Kingdom
1,2,3-Propanetriol		-	TWA: 50 mg/m	3 TV	/A: 10 mg/m ³
56-81-5			STEL: 100 mg/n	n ³ ST	EL: 30 mg/m ³
5-Chloro-2-methyl-3(2H)-i:	sothia	-	S+		-
zolone, mixture with			TWA: 0.2 mg/m	3	
2-methyl-3(2H)-isothiazo	lone		STEL: 0.4 mg/m	1 ³	
55965-84-9					

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

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.

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

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

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquidAppearanceLiquidColourlight yellowOdourLow.

Odour threshold No information available

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

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash point No data available None known

Autoignition temperature 392.8 °C

Decomposition temperature

None known

pH No data available None known
 pH (as aqueous solution) No data available No information available

pH (as aqueous solution)No data availableNo informationKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Water solubility Miscible in water

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Bulk density No data available Liquid Density No data available

Relative vapour density

No data available

None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

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Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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 May cause sensitisation by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons (based on components).

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h
5-Chloro-2-methyl-3(2H)-isothia zolone, mixture with 2-methyl-3(2H)-isothiazolone	= 53 mg/kg (Rat)	= 87.12 mg/kg (Rabbit)	-

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

Skin corrosion/irritationNo information available.

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Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
		Oncorhynchus mykiss)		

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.75
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	0.7
2-methyl-3(2H)-isothiazolone	

12.4. Mobility in soil

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Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
1,2,3-Propanetriol	The substance is not PBT / vPvB
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	The substance is not PBT / vPvB
2-methyl-3(2H)-isothiazolone	

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

<u>IATA</u>

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

14.7 Maritime transport in bulk No information available according to IMO instruments

RID

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

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ADR

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

Not regulated

Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

SECTION 15: Regulatory information

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorisation per	
	Annex XVII	REACH Annex XIV	
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	Use restricted. See entry 75.	-	
2-methyl-3(2H)-isothiazolone - 55965-84-9	•		

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	Product-type 2: Disinfectants and algaecides not intended
2-methyl-3(2H)-isothiazolone - 55965-84-9	for direct application to humans or animals Product-type 4:
	Food and feed area Product-type 6: Preservatives for
	products during storage Product-type 11: Preservatives for
	liquid-cooling and processing systems Product-type 12:
	Slimicides Product-type 13: Working or cutting fluid
	preservatives

<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

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Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H331 - Toxic if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure					
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used				
Acute oral toxicity	Calculation method				
Acute dermal toxicity	Calculation method				
Acute inhalation toxicity - gas	Calculation method				
Acute inhalation toxicity - vapour	Calculation method				
Acute inhalation toxicity - dust/mist	Calculation method				
Skin corrosion/irritation	Calculation method				
Serious eye damage/eye irritation	Calculation method				
Respiratory sensitisation	Calculation method				
Skin sensitisation	Calculation method				
Mutagenicity	Calculation method				
Carcinogenicity	Calculation method				
Reproductive toxicity	Calculation method				
STOT - single exposure	Calculation method				
STOT - repeated exposure	Calculation method				
Acute aquatic toxicity	Calculation method				
Chronic aquatic toxicity	Calculation method				
Aspiration hazard	Calculation method				
Ozone	Calculation method				

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA API)

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)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 15-Mar-2022

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 06-Aug-2024 Revision Number 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R5 - HIV Ag positive control, 1 ml

Catalogue Number(s) 7286D

Nanoforms Not applicable

Pure substance/mixture Mixture

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In vitro diagnostic

Restricted to professional users

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters

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

USA

Manufacturer Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141

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CHEMTREC South Africa: 0-800-983-611

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation	Category 1 - (H317)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone



Signal word Warning

Hazard statements

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P273 - Avoid release to the environment

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

P280 - Wear protective gloves/protective clothing/eye protection/face protection

2.3. Other hazards

Contains animal source material. (Cattle).

Contains human source material and / or potentially infectious components

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
		number	Index No)	to Regulation (EC) No.	concentration		(long-term)
				1272/2008 [CLP]	limit (SCL)		
1,2,3-Propanetriol	10 - 20	Not available	200-289-5	Not classified	-	-	-
56-81-5							
5-Chloro-2-methyl-3	0.001 -	Not available	(613-167-00	Acute Tox. 3 (H301)	Eye Irrit. 2 ::	100	100
(2H)-isothiazolone,	0.01		-5)	Acute Tox. 3 (H311)	0.06%<=C<0.6		
mixture with				Acute Tox. 3 (H331)	%		
2-methyl-3(2H)-isoth				Skin Corr. 1B (H314)	Skin Corr. 1C ::		

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iazolone		Eye Dam. 1 (H318)	C>=0.6%	
55965-84-9		Skin Sens. 1A (H317)	Skin Irrit. 2 ::	
		(EUH071)	0.06%<=C<0.6	
		Aquatic Acute 1 (H400)	%	
		Aquatic Chronic 1	Skin Sens. 1A	
		(H410)	:: C>=0.0015%	
			Eye Dam. 1 ::	
			C>=0.6%	

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
1,2,3-Propanetriol 56-81-5	12600	10000	2.75	No data available	No data available
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol		87.12	No data available	No data available	No data available
one 55965-84-9					

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

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

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

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a doctor.

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

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctorsMay cause sensitisation in susceptible persons. Treat symptomatically. Contains human

source material and / or potentially infectious components.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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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.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

Product is or contains a sensitiser. May cause sensitisation by skin contact.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning upUse: Disinfectant. Clean contaminated surface thoroughly.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. 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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

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

7.2. Conditions for safe storage, including any incompatibilities

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

product and label instructions.

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7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	Europe	ean Union	Austria	Belgium	Bul	Igaria	Croatia
1,2,3-Propanetriol	-		-	TWA: 10 mg/m ³		-	TWA: 10 mg/m ³
56-81-5							
5-Chloro-2-methyl-3(2H)-i		-	TWA: 0.05 mg/m ³	-		-	-
sothiazolone, mixture with			Sh+				
2-methyl-3(2H)-isothiazol							
one							
55965-84-9							
Chemical name	C	yprus	Czech Republic	Denmark	Es	tonia	Finland
1,2,3-Propanetriol		-	TWA: 10 mg/m ³	-	TWA: 1	10 mg/m ³	TWA: 20 mg/m ³
56-81-5			Ceiling: 15 mg/m ³				
Chemical name	Fi	rance	Germany TRGS	Germany DFG	Gr	eece	Hungary
1,2,3-Propanetriol	TWA:	10 mg/m ³	TWA: 200 mg/m ³	TWA: 200 mg/m ³	TWA: 1	10 mg/m ³	-
56-81-5		-		Peak: 400 mg/m ³			
Chemical name Lu		embourg	Malta	Netherlands	No	rway	Poland
1,2,3-Propanetriol		-	-	-		-	TWA: 10 mg/m ³
56-81-5							
Chemical name	Po	rtugal	Romania	Slovakia	Slo	venia	Spain
1,2,3-Propanetriol	TWA:	10 mg/m ³	-	TWA: 11 mg/m ³	TWA: 2	00 mg/m ³	TWA: 10 mg/m ³
56-81-5		Ū				100 mg/m ³	
Chemical name		Sv	veden	Switzerland		Uni	ted Kingdom
1,2,3-Propanetriol			-	TWA: 50 mg/m	3	TW	'A: 10 mg/m ³
56-81-5				STEL: 100 mg/n	n ³		EL: 30 mg/m ³
5-Chloro-2-methyl-3(2H)-isothia			-	S+			-
zolone, mixture with				TWA: 0.2 mg/m	3		
2-methyl-3(2H)-isothiazolone				STEL: 0.4 mg/m			
55965-84-9							

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

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.

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

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

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Appearance
Colour
Odour
Liquid
Liquid
light yellow
Low.

Odour threshold No information available

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

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash point No data available None known

Autoignition temperature 392.8 °C

Decomposition temperature

None known

pH No data available None known
 pH (as aqueous solution) No data available No information available

Kinematic viscosity

No data available

None known

No data available

None known

Water solubility Miscible in water

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Bulk density
No data available
No data available
No data available

Relative vapour density

No data available

None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

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Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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 May cause sensitisation by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons (based on components).

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat)4 h
5-Chloro-2-methyl-3(2H)-isothia zolone, mixture with 2-methyl-3(2H)-isothiazolone	= 53 mg/kg (Rat)	= 87.12 mg/kg (Rabbit)	-

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

Skin corrosion/irritationNo information available.

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Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
		Oncorhynchus mykiss)		

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.75
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	0.7
2-methyl-3(2H)-isothiazolone	

12.4. Mobility in soil

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Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
1,2,3-Propanetriol	The substance is not PBT / vPvB
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

<u>IATA</u>

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

14.7 Maritime transport in bulk No information available according to IMO instruments

RID

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

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ADR

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions

None

SECTION 15: Regulatory information

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name		Restricted substance per REACH	Substance subject to authorisation per	
		Annex XVII	REACH Annex XIV	
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with		Use restricted. See entry 75.	-	
	2-methyl-3(2H)-isothiazolone - 55965-84-9	•		

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	Product-type 2: Disinfectants and algaecides not intended
2-methyl-3(2H)-isothiazolone - 55965-84-9	for direct application to humans or animals Product-type 4:
	Food and feed area Product-type 6: Preservatives for
	products during storage Product-type 11: Preservatives for
	liquid-cooling and processing systems Product-type 12:
	Slimicides Product-type 13: Working or cutting fluid
	preservatives

<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

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Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H331 - Toxic if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure				
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used			
Acute oral toxicity	Calculation method			
Acute dermal toxicity	Calculation method			
Acute inhalation toxicity - gas	Calculation method			
Acute inhalation toxicity - vapour	Calculation method			
Acute inhalation toxicity - dust/mist	Calculation method			
Skin corrosion/irritation	Calculation method			
Serious eye damage/eye irritation	Calculation method			
Respiratory sensitisation	Calculation method			
Skin sensitisation	Calculation method			
Mutagenicity	Calculation method			
Carcinogenicity	Calculation method			
Reproductive toxicity	Calculation method			
STOT - single exposure	Calculation method			
STOT - repeated exposure	Calculation method			
Acute aquatic toxicity	Calculation method			
Chronic aquatic toxicity	Calculation method			
Aspiration hazard	Calculation method			
Ozone	Calculation method			

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA API)

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)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 06-Aug-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 31-Jul-2024 Revision Number 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R6 - Conjugate 1, 10 ml

Catalogue Number(s) 7286E

Nanoforms Not applicable

REACH Authorization Number REACH/23/9/2

Pure substance/mixture Mixture

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In vitro diagnostic

Restricted to professional users

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturerBio-Rad Laboratories Inc.Bio-Rad

1000 Alfred Nobel Drive 3 boulevard Raymond Poincaré Hercules, CA 94547 92430 Marnes-la-Coquette

USA France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

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CHEMTREC India: 000-800-100-7141 CHEMTREC South Africa: 0-800-983-611

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation	Category 3 - (H316)
Serious eye damage/eye irritation	Category 2A - (H319)
Skin sensitisation	Category 1 - (H317)
Acute aquatic toxicity	Category 3 - (H402)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone



Signal word Warning

Hazard statements

H316 - Causes mild skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H402 - Harmful to aquatic life

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P273 - Avoid release to the environment

P337 + P313 - If eye irritation persists: Get medical advice/attention

P391 - Collect spillage

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P280 - Wear protective gloves/protective clothing/eye protection/face protection

2.3. Other hazards

Contains animal source material. (Sheep).

Endocrine Disruptor Information Contains a known or suspected endocrine disruptor.

Chemical name	EU - REACH (1907/2006) - Article 59(1)	EU - REACH (1907/2006) - Endocrine
	- Candidate List of Substances of Very	Disruptor Assessment List of
	High Concern (SVHC) for Authorisation	Substances
Poly(oxy-1,2-ethanediyl),	Endocrine disrupting properties	-
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]ome		
gahydroxy-		

Chemical name	Endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605(4)
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]omegahydroxy-	Endocrine disrupting properties

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SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	,	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Lithium chloride 7447-41-8	1 - 2.5	Not available	231-212-3	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	-	1	-
Poly(oxy-1,2-ethane diyl), .alpha[4-(1,1,3,3-te tramethylbutyl)phen yl]omegahydroxy-9002-93-1		Not available	-	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 1 (H410)	-	-	-
Chloroform 67-66-3	0.1 - 0.299	Not available	200-663-8 (602-006-00 -4)	Acute Tox. 4 (H302) Acute Tox. 3 (H331) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Carc. 2 (H351) Repr. 2 (H361d) STOT RE 1 (H372)	-	-	-
5-Chloro-2-methyl-3 (2H)-isothiazolone, mixture with 2-methyl-3(2H)-isoth iazolone 55965-84-9	0.099	Not available	(613-167-00 -5)	Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317)	C>=0.6% Skin Irrit. 2 :: 0.06%<=C<0.6	100	100

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Lithium chloride 7447-41-8	526	2000	No data available	No data available	No data available
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetram ethylbutyl)phenyl]omeg ahydroxy- 9002-93-1		No data available	No data available	No data available	No data available
Chloroform 67-66-3	450	20000	47.702	No data available	No data available
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol		87.12	No data available	No data available	No data available

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Chemical name	Oral LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
one 55965-84-9				

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article

Chemical name	CAS No.	SVHC candidates
Poly(oxy-1,2-ethanediyl),	9002-93-1	X
.alpha[4-(1,1,3,3-tetramethylbutyl)ph		
enyl]omegahydroxy-		

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact 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. Get medical attention if irritation develops and

persists.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a doctor.

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

vomiting. Call a doctor.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation.

Prolonged contact may cause redness and irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors May cause sensitisation in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. 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.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the Product is or or

chemical

Product is or contains a sensitiser. May cause sensitisation by skin contact.

5.3. Advice for firefighters

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Special protective equipment and precautions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

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

6.2. Environmental precautions

Environmental precautionsSee Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning upTake up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. 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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

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.

7.2. 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. Store according to product and label instructions.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Exposure Limits

Chemical name	Euro	pean Union	Austria	Belgium	Bu	Igaria	Croatia
Chloroform	TWA: 2 ppm		TWA: 2 ppm	TWA: 2 ppm	TWA	: 2 ppm	TWA: 2 ppm
67-66-3	TWA	: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 1	0.0 mg/m ³	TWA: 10 mg/m ³
		*	H*	D*		K*	*
5-Chloro-2-methyl-3(2H)-i		-	TWA: 0.05 mg/m ³	-		-	-
sothiazolone, mixture with			Sh+				
2-methyl-3(2H)-isothiazol							
one							
55965-84-9		^	0 1 5 11	D 1			F: 1 1
Chemical name	(Cyprus	Czech Republic	Denmark		tonia	Finland
Chloroform 67-66-3	T \A.	 /	TWA: 10 mg/m ³ Ceiling: 20 mg/m ³	TWA: 2 ppm		: 2 ppm 10 mg/m ³	TWA: 2 ppm TWA: 10 mg/m ³
67-66-3		/A: 2 ppm	D*	TWA: 10 mg/m ³ H*		ro mg/m³ A*	STEL: 4 ppm
	IVVA	: 10 mg/m ³	D	STEL: 4 ppm		A	STEL: 4 ppm STEL: 20 mg/m ³
				STEL: 4 ppin			iho*
Chemical name		France	Germany TRGS	Germany DFG	Gr	eece	Hungary
Chloroform		/A: 2 ppm	TWA: 0.5 ppm	TWA: 0.5 ppm	_	10 ppm	TWA: 10 mg/m ³
67-66-3		: 10 mg/m ³	TWA: 0.5 ppm TWA: 2.5 mg/m ³	TWA: 0.5 ppm		50 mg/m ³	TWA: 10 mg/m
0, 99.9		L: 50 ppm	H*	Peak: 1 ppm	1 0 0 / 1.	50 mg/m	b*
		: 250 mg/m ³		Peak: 5 mg/m ³			~
	0	*		*			
Chemical name	Ireland		Italy MDLPS	Italy AIDII	Latvia		Lithuania
Chloroform	TWA: 2 ppm		TWA: 2 ppm	TWA: 10 ppm		: 2 ppm	O*
67-66-3	TWA: 9.8 mg/m ³		TWA: 10 mg/m ³	TWA: 49 mg/m ³		10 mg/m ³	TWA: 10 mg/m ³
		EL: 6 ppm	cute*		Α	\da*	TWA: 2 ppm
	STEL:	: 29.4 mg/m ³					
Chamical name	Lin	Sk*	Malta	Netherlands	Nic	NEW (0) (Poland
Chemical name Chloroform	Luxembourg Peau*		skin*	TWA: 1 ppm	Norway TWA: 2 ppm		TWA: 8 mg/m ³
67-66-3		/A: 2 ppm	TWA: 2 ppm	TWA: 1 ppin TWA: 5 mg/m ³	TWA: 2 ppin TWA: 10 mg/m ³		skóra*
07-00-3		: 10 mg/m ³	TWA: 2 ppin TWA: 10 mg/m ³	STEL: 5 ppm		20 mg/m ³	SKUIA
	1 4 4 7	i. 10 mg/m²	TWA. TO HIG/III	STEL: 25 mg/m ³		_: 4 ppm	
				OTEL. 20 mg/m		т ррііі Н*	
Chemical name	P	Portugal	Romania	Slovakia		venia	Spain
Chloroform	TW	/A: 2 ppm	TWA: 2 ppm	TWA: 2 ppm		: 2 ppm	TWA: 2 ppm
67-66-3	TWA: 10 mg/m ³		TWA: 10 mg/m ³	TWA: 10 mg/m ³		10 mg/m ³	TWA: 10 mg/m ³
	Cutânea*		P*	K*		K*	vía dérmica*
Chemical name			veden	Switzerland			ted Kingdom
Chloroform			/: 2 ppm	TWA: 0.5 ppm			WA: 2 ppm
67-66-3	NGV:		10 mg/m ³	TWA: 2.5 mg/m	13		A: 9.9 mg/m ³
			le KGV: 5 ppm	STEL: 1 ppm			TEL: 6 ppm
	Vägledande		KGV: 25 mg/m ³	STEL: 5 mg/m ³	•	SIE	L: 29.7 mg/m ³
C Oblava O va - 45-14 0/01/1\ '	4h: -		H*	H*			Sk*
5-Chloro-2-methyl-3(2H)-i			-	S+	.3		-
zolone, mixture with 2-methyl-3(2H)-isothiazo				TWA: 0.2 mg/m STEL: 0.4 mg/m			
2-metnyi-3(2H)-isotnia20 55965-84-9	ione			31EL. U.4 IIIg/II	I~		
55905-04-9						l .	

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Chloroform	-	40 mg/L (urine -	-	-	-
67-66-3		Trichloroacetic acid			
		not provided)			
		<=39 U/I (- Serum			
		transaminases GGT			
		not provided)			
		<=66 U/I (- Serum			
		transaminases GGT			

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not provided)	
<=35 U/I (- Serum	
transaminases	
SGPT not provided)	
<=50 U/I (- Serum	
transaminases	
SGPT not provided)	
<=35 U/I (- Serum	
transaminases	
SGOT not provided)	
<=50 U/I (- Serum	
transaminases	
SGOT not provided)	

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

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.

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.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquidAppearanceLiquidColourgreenOdourLow.

Odour threshold No information available

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

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available limits

Lower flammability or explosive No data available

limits

Flash pointNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

H No data available

pH (as aqueous solution) No data available No information available

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No data available Kinematic viscosity None known Dynamic viscosity No data available None known Water solubility Miscible in water Solubility(ies) No data available None known Partition coefficient No data available None known No data available Vapour pressure None known No data available Relative density None known

Bulk density
No data available
Liquid Density
No data available

Relative vapour density

No data available

No data available

Particle characteristics

Particle SizeNo information availableParticle Size DistributionNo information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

None known

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoidNone known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract.

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

(based on components). May cause redness, itching, and pain.

Skin contact May cause sensitisation by skin contact. Specific test data for the substance or mixture is

not available Repeated or prolonged skin contact may cause allergic reactions with susceptible persons (based on components). May cause irritation. Prolonged contact may

cause redness and irritation. Causes mild skin irritation.

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

gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. May cause redness and tearing of the eyes. 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) 19,449.50 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Lithium chloride	= 526 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Poly(oxy-1,2-ethanediyl), .alpha[4-(1,1,3,3-tetramethylbu tyl)phenyl]omegahydroxy-	= 1800 mg/kg (Rat)	-	-
Chloroform	= 450 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 47702 mg/m ³ (Rat) 4 h
5-Chloro-2-methyl-3(2H)-isothia zolone, mixture with 2-methyl-3(2H)-isothiazolone	= 53 mg/kg (Rat)	= 87.12 mg/kg (Rabbit)	-

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

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

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation May cause sensitisation by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

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

Chemical name	European Union
Chloroform	Carc. 2

Reproductive toxicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

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Chemical name	European Union	
Chloroform	Repr. 2	

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Contains a known or suspected endocrine disruptor.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Lithium chloride	-	LC50: =158mg/L (96h,	-	-
		Oncorhynchus mykiss)		
Chloroform	-	LC50: =71mg/L (96h,	-	EC50: =29mg/L (48h,
		Pimephales promelas)		Daphnia magna)
		LC50: =18mg/L (96h,		
		Oncorhynchus mykiss)		
		LC50: =18mg/L (96h,		
		Lepomis macrochirus)		
		LC50: =300mg/L (96h,		
		Poecilia reticulata)		

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Lithium chloride	-2.66
Chloroform	2
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	0.7
2-methyl-3(2H)-isothiazolone	

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

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PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Lithium chloride	The substance is not PBT / vPvB
Chloroform	The substance is not PBT / vPvB
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	The substance is not PBT / vPvB
2-methyl-3(2H)-isothiazolone	

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products

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

in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

14.7 Maritime transport in bulk No infe

according to IMO instruments

No information available

RID

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

<u>ADR</u>

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14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated
 Not regulated
 Not regulated
 Not regulated
 Not applicable

14.6 Special precautions for user

Special Provisions

SECTION 15: Regulatory information

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

None

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Chloroform	RG 12	-
67-66-3		

Netherlands

Chemical name	Netherlands - List of	Netherlands - List of	Netherlands - List of
	Carcinogens	Mutagens	Reproductive Toxins
Lithium chloride	-	-	Fertility Category 2
			Development Category 1A
			Can be harmful via
			breastfeeding
Chloroform	-	-	Development Category 2

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

	,	
Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Poly(oxy-1,2-ethanediyl),	-	42.
.alpha[4-(1,1,3,3-tetramethylbutyl)phenyl]omega.		
-hydroxy 9002-93-1		
Chloroform - 67-66-3	Use restricted. See entry 32.	-
	Use restricted. See entry 75.	
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	Use restricted. See entry 75.	-
2-methyl-3(2H)-isothiazolone - 55965-84-9	ļ	

Persistent Organic Pollutants

Not applicable

Export Notification requirements

This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

me comments and company and co		
	Chemical name	European Export/Import Restrictions per (EC) 689/2008 - Annex
		Number
	Chloroform - 67-66-3	l.1

Dangerous substance category per Seveso Directive (2012/18/EU)

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E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	Product-type 2: Disinfectants and algaecides not intended
2-methyl-3(2H)-isothiazolone - 55965-84-9	for direct application to humans or animals Product-type 4:
	Food and feed area Product-type 6: Preservatives for
	products during storage Product-type 11: Preservatives for
	liquid-cooling and processing systems Product-type 12:
	Slimicides Product-type 13: Working or cutting fluid
	preservatives

EU - Water Framework Directive (2000/60/EC)

Chemical name	EU - Water Framework Directive (2000/60/EC)	
Chloroform - 67-66-3	Priority substance	

EU - Environmental Quality Standards (2008/105/EC)

- 2		
	Chemical name	EU - Environmental Quality Standards (2008/105/EC)
	Chloroform - 67-66-3	Priority substance

<u>International Inventories</u> Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eve damage

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H351 - Suspected of causing cancer

H361d - Suspected of damaging the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure

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Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method
Health hazards not otherwise classified (HHNOC)	Calculation method

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

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)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 31-Jul-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 06-Aug-2024 Revision Number 1.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R7a - Conjugate 2 (lyoph.), q.s. ad, 30 ml

Catalogue Number(s) 7288F, 7338F

Nanoforms Not applicable

Pure substance/mixture Mixture

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In vitro diagnostic

Restricted to professional users

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters
Bio-Rad Laboratories Inc.

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

USA

Manufacturer Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141

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CHEMTREC South Africa: 0-800-983-611

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation	Category 1 - (H317)
Acute aquatic toxicity	Category 3 - (H402)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone



Signal word Warning

Hazard statements

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P273 - Avoid release to the environment

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

P280 - Wear protective gloves/protective clothing/eye protection/face protection

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
		number	Index No)	to Regulation (EC) No.	concentration		(long-term)
				1272/2008 [CLP]	limit (SCL)		
Sodium chloride	1 - 2.5	Not available	231-598-3	Not classified	-	-	-
7647-14-5							
5-Chloro-2-methyl-3	0.01 -	Not available	(613-167-00	Acute Tox. 3 (H301)	Eye Irrit. 2 ::	100	100
(2H)-isothiazolone,	0.099		-5)	Acute Tox. 3 (H311)	0.06%<=C<0.6		
mixture with				Acute Tox. 3 (H331)	%		
2-methyl-3(2H)-isoth				Skin Corr. 1B (H314)	Skin Corr. 1C::		

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iazolone	Eye Dam. 1 (H318)	
55965-84-9	Skin Sens. 1A (H317) Skin Irrit. 2 ::	
	(EUH071) 0.06%<=C<0.6	
	Aquatic Acute 1 (H400) %	
	Aquatic Chronic 1 Skin Sens. 1A	
	(H410) :: C>=0.0015%	
	Eye Dam. 1 ::	
	C>=0.6%	

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Sodium chloride 7647-14-5	3550	10000	No data available	No data available	No data available
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9		87.12	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

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 doctor.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a doctor.

Ingestion Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors May cause sensitisation in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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surrounding environment.

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

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

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

Product is or contains a sensitiser. May cause sensitisation by skin contact.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

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

6.3. 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 Take up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. 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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

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

7.2. 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.

7.3. Specific end use(s)

EGHS / BE Page 99 / 121 Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	Euro	pean Union	Austria	Belgium	Bu	Igaria	Croatia
5-Chloro-2-methyl-3(2H)-i		-	TWA: 0.05 mg/m ³	-		-	-
sothiazolone, mixture with			Sh+				
2-methyl-3(2H)-isothiazol							
one							
55965-84-9							
Chemical name		Ireland	Italy MDLPS	Italy AIDII	La	atvia	Lithuania
Sodium chloride		-	=	-	TWA:	5 mg/m ³	TWA: 5 mg/m ³
7647-14-5							
Chemical name		Sv	weden	Switzerland		Uni	ted Kingdom
5-Chloro-2-methyl-3(2H)-is	-3(2H)-isothia		- S+				-
zolone, mixture with				TWA: 0.2 mg/m	3		
2-methyl-3(2H)-isothiazolone				STEL: 0.4 mg/m	1 ³		
55965-84-9							

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

No information available.

(PNEC)
8.2. Exposure controls

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.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateSolidAppearancesolidColourwhite

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Odour Low.

Odour threshold No information available

Property Values Remarks • Method

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash point No data available None known
Autoignition temperature No data available None known
Decomposition temperature
pH No data available None known
No data available None known

pH (as aqueous solution)

No data available

No information available

Kinematic viscosity
Dynamic viscosity
Water solubility
Solubility(ies)
No data available
No data available
No data available
No data available

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Bulk density
No data available
No data available

Relative vapour density No data available None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

None known

None known

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoidNone known based on information supplied.

10.5. Incompatible materials

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Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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 May cause sensitisation by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons (based on components).

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral) 92,438.00 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium chloride	= 3550 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat)1 h
5-Chloro-2-methyl-3(2H)-isothia zolone, mixture with 2-methyl-3(2H)-isothiazolone	= 53 mg/kg (Rat)	= 87.12 mg/kg (Rabbit)	-

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation May cause sensitisation by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

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Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium chloride	-	LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: =7050mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss)	-	EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	0.7
2-methyl-3(2H)-isothiazolone	

12.4. Mobility in soil

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Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment		
Sodium chloride	The substance is not PBT / vPvB		
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	The substance is not PBT / vPvB		

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

<u>IATA</u>

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

14.7 Maritime transport in bulk No information available

according to IMO instruments

RID

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

Special Provisions None

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ADR

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Sodium chloride	RG 78	-
7647-14-5		

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone - 55965-84-9	Use restricted. See entry 75.	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Plant Protection Products (1107/2009/EC)

LO TIAIR TTORCCION TTOACCIS (TTO7/2003/LO)	
Chemical name	EU - Plant Protection Products (1107/2009/EC)
Sodium chloride - 7647-14-5	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Sodium chloride - 7647-14-5	Product-type 1: Human hygiene
	Product-type 2: Disinfectants and algaecides not intended
2-methyl-3(2H)-isothiazolone - 55965-84-9	for direct application to humans or animals Product-type 4:
	Food and feed area Product-type 6: Preservatives for
	products during storage Product-type 11: Preservatives for
	liquid-cooling and processing systems Product-type 12:
	Slimicides Product-type 13: Working or cutting fluid
	preservatives

International Inventories

Contact supplier for inventory compliance status

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15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H331 - Toxic if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure		
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used	
Acute oral toxicity	Calculation method	
Acute dermal toxicity	Calculation method	
Acute inhalation toxicity - gas	Calculation method	
Acute inhalation toxicity - vapour	Calculation method	
Acute inhalation toxicity - dust/mist	Calculation method	
Skin corrosion/irritation	Calculation method	
Serious eye damage/eye irritation	Calculation method	
Respiratory sensitisation	Calculation method	
Skin sensitisation	Calculation method	
Mutagenicity	Calculation method	
Carcinogenicity	Calculation method	
Reproductive toxicity	Calculation method	
STOT - single exposure	Calculation method	
STOT - repeated exposure	Calculation method	
Acute aquatic toxicity	Calculation method	
Chronic aquatic toxicity	Calculation method	
Aspiration hazard	Calculation method	
Ozone	Calculation method	
Health hazards not otherwise classified (HHNOC)	Calculation method	

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

Environmental Protection Agency

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

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

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U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 06-Aug-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 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

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 06-Aug-2024 Revision Number 1.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name R7b - Conjugate 2 Diluent, 30 ml

Catalogue Number(s) 7288G, 7338G

Nanoforms Not applicable

Pure substance/mixture Mixture

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use In vitro diagnostic

Restricted to professional users

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters
Bio-Rad Laboratories Inc.

1000 Alfred Nobel Drive Hercules, CA 94547

USA

Manufacturer Bio-Rad

3 boulevard Raymond Poincaré 92430 Marnes-la-Coquette

France

e-mail: fds-msds.fr@bio-rad.com

Legal Entity / Contact Address

The Junction Station Road Watford, WD17 1ET

UK

Bio-Rad Laboratories Pvt. Ltd.

Bio-Rad House

86-87, Udyog Vihar Phase IV Gurgaon

122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

43 Bolton Road

Parkwood, Johannesburg 2192

South Africa

EU Representative:

Bio-Rad

3 bld Raymond Poincaré 92430 Marnes-la-Coquette

France

Phone: (33) 1-4795-6000

For further information, please contact

Technical Service 00800 00246 723

Ireland: Techsupport.UK@bio-rad.com India: support.india@bio-rad.com

South Africa: cdg_techsupport_eemea@bio-rad.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Ireland: 353-19014670

CHEMTREC India: 000-800-100-7141

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CHEMTREC South Africa: 0-800-983-611

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation	Category 1 - (H317)
Acute aquatic toxicity	Category 3 - (H402)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone



Signal word Warning

Hazard statements

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P273 - Avoid release to the environment

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

P280 - Wear protective gloves/protective clothing/eye protection/face protection

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
		number	Index No)	to Regulation (EC) No.	concentration		(long-term)
				1272/2008 [CLP]	limit (SCL)		
1,2,3-Propanetriol	10 - 20	Not available	200-289-5	Not classified	-	-	-
56-81-5							
Chloroform	0.1 -	Not available	200-663-8	Acute Tox. 4 (H302)	-	-	-
67-66-3	0.299		(602-006-00	Acute Tox. 3 (H331)			
			-4)	Skin Irrit. 2 (H315)			
				Eye Irrit. 2 (H319)			

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				Carc. 2 (H351) Repr. 2 (H361d) STOT RE 1 (H372)		
5-Chloro-2-methyl-3 (2H)-isothiazolone, mixture with 2-methyl-3(2H)-isoth iazolone 55965-84-9	0.099	Not available	(613-167-00 -5)	Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317)	C>=0.6% Skin Irrit. 2 :: 0.06%<=C<0.6	100

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
1,2,3-Propanetriol 56-81-5	12600	10000	2.75	No data available	No data available
Chloroform 67-66-3	450	20000	47.702	No data available	No data available
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one		87.12	No data available	No data available	No data available
55965-84-9					

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

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 doctor.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a doctor.

Ingestion Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

4.3. Indication of any immediate medical attention and special treatment needed

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Note to doctors May cause sensitisation in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. 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.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Product is or contains a sensitiser. May cause sensitisation by skin contact.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning upTake up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. 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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

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

7.2. 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.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
1,2,3-Propanetriol 56-81-5	-	-	TWA: 10 mg/m ³	-	TWA: 10 mg/m ³
Chloroform 67-66-3	TWA: 2 ppm TWA: 10 mg/m ³	TWA: 2 ppm TWA: 10 mg/m³ H*	TWA: 2 ppm TWA: 10 mg/m ³ D*	TWA: 2 ppm TWA: 10.0 mg/m ³ K*	TWA: 2 ppm TWA: 10 mg/m ³
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9		TWA: 0.05 mg/m ³ Sh+	-	-	-
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
1,2,3-Propanetriol 56-81-5	-	TWA: 10 mg/m ³ Ceiling: 15 mg/m ³	-	TWA: 10 mg/m ³	TWA: 20 mg/m ³
Chloroform 67-66-3	* TWA: 2 ppm TWA: 10 mg/m³	TWA: 10 mg/m³ Ceiling: 20 mg/m³ D*	TWA: 2 ppm TWA: 10 mg/m³ H* STEL: 4 ppm STEL: 20 mg/m³	TWA: 2 ppm TWA: 10 mg/m³ A*	TWA: 2 ppm TWA: 10 mg/m³ STEL: 4 ppm STEL: 20 mg/m³ iho*
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
1,2,3-Propanetriol 56-81-5	TWA: 10 mg/m ³	TWA: 200 mg/m ³	TWA: 200 mg/m ³ Peak: 400 mg/m ³	TWA: 10 mg/m ³	-
Chloroform 67-66-3	TWA: 2 ppm TWA: 10 mg/m³ STEL: 50 ppm STEL: 250 mg/m³ *	TWA: 0.5 ppm TWA: 2.5 mg/m³ H*	TWA: 0.5 ppm TWA: 2.5 mg/m³ Peak: 1 ppm Peak: 5 mg/m³ *	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 mg/m ³ TWA: 2 ppm b*
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Chloroform 67-66-3	TWA: 2 ppm TWA: 9.8 mg/m³ STEL: 6 ppm STEL: 29.4 mg/m³ Sk*	TWA: 2 ppm TWA: 10 mg/m³ cute*	TWA: 10 ppm TWA: 49 mg/m³	TWA: 2 ppm TWA: 10 mg/m ³ Ada*	O* TWA: 10 mg/m³ TWA: 2 ppm
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
1,2,3-Propanetriol 56-81-5	-	-	-	-	TWA: 10 mg/m ³
Chloroform 67-66-3	Peau* TWA: 2 ppm TWA: 10 mg/m³	skin* TWA: 2 ppm TWA: 10 mg/m³	TWA: 1 ppm TWA: 5 mg/m³ STEL: 5 ppm STEL: 25 mg/m³	TWA: 2 ppm TWA: 10 mg/m³ STEL: 20 mg/m³ STEL: 4 ppm H*	TWA: 8 mg/m³ skóra*
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain

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1,2,3-Propanetriol	TWA	A: 10 mg/m ³	-	TWA: 11 mg/m ³		200 mg/m ³	TWA: 10 mg/m ³
56-81-5					STEL: 4	100 mg/m ³	
Chloroform	TV	VA: 2 ppm	TWA: 2 ppm	TWA: 2 ppm	TWA	: 2 ppm	TWA: 2 ppm
67-66-3	TWA	A: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA:	10 mg/m ³	TWA: 10 mg/m ³
	C	Cutânea*	P*	K*		K*	vía dérmica*
Chemical name		Sı	weden	Switzerland		Uni	ted Kingdom
1,2,3-Propanetriol			-	TWA: 50 mg/m	3	TWA: 10 mg/m ³	
56-81-5				STEL: 100 mg/m ³		STEL: 30 mg/m ³	
Chloroform		NG\	/: 2 ppm	TWA: 0.5 ppm		TWA: 2 ppm	
67-66-3		NGV: 10 mg/m ³		TWA: 2.5 mg/m	1 ³	TW	A: 9.9 mg/m ³
		Vägledand	le KGV: 5 ppm	STEL: 1 ppm		S	ΓEL: 6 ppm
		Vägledande	KGV: 25 mg/m ³	STEL: 5 mg/m ²	3	STE	L: 29.7 mg/m ³
		H*		H*			Sk*
5-Chloro-2-methyl-3(2H)-is	othia	-		S+			-
zolone, mixture with	nixture with		TWA: 0.2 mg/m	1 ³			
2-methyl-3(2H)-isothiazolone			STEL: 0.4 mg/n	1 ³			
55965-84-9							

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Chloroform	-	40 mg/L (urine -	-	=	-
67-66-3		Trichloroacetic acid			
		not provided)			
		<=39 U/I (- Serum			
		transaminases GGT			
		not provided)			
		<=66 U/I (- Serum			
		transaminases GGT			
		not provided)			
		<=35 U/I (- Serum			
		transaminases			
		SGPT not provided)			
		<=50 U/I (- Serum			
		transaminases			
		SGPT not provided)			
		<=35 U/I (- Serum			
		transaminases			
		SGOT not provided)			
		<=50 U/I (- Serum			
		transaminases			
		SGOT not provided)			

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

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.

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

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Colour red
Odour Low.

Odour threshold No information available

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

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash point No data available None known

Autoignition temperature 392.78 °C

Decomposition temperature

None known

pH No data available None known
pH (as aqueous solution) No data available No information available

pH (as aqueous solution)No data availableNo information aKinematic viscosityNo data availableNone known

Kinematic viscosity

No data available

None known

No data available

None known

Water solubility Miscible in water

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Bulk density
No data available
No data available

Relative vapour density No data available None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid

Conditions to avoidNone known based on information supplied.

10.5. Incompatible materials

Incompatible materialsNone known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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 May cause sensitisation by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons (based on components).

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral) 600,000.00 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3-Propanetriol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat)4 h
Chloroform	= 450 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 47702 mg/m³ (Rat) 4 h
5-Chloro-2-methyl-3(2H)-isothia zolone, mixture with 2-methyl-3(2H)-isothiazolone	= 53 mg/kg (Rat)	= 87.12 mg/kg (Rabbit)	-

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

Skin corrosion/irritationNo information available.

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Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation May cause sensitisation by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

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

Chemical name	European Union	
Chloroform	Carc. 2	

Reproductive toxicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Chloroform	Repr. 2

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	-
		Oncorhynchus mykiss)		
Chloroform	-	LC50: =71mg/L (96h,	-	EC50: =29mg/L (48h,
		Pimephales promelas)		Daphnia magna)
		LC50: =18mg/L (96h,		_
		Oncorhynchus mykiss)		
		LC50: =18mg/L (96h,		
		Lepomis macrochirus)		
		LC50: =300mg/L (96h,		
		Poecilia reticulata)		

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12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.75
Chloroform	2
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone	0.7

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
1,2,3-Propanetriol	The substance is not PBT / vPvB
Chloroform	The substance is not PBT / vPvB
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	The substance is not PBT / vPvB
2-methyl-3(2H)-isothiazolone	

12.6. Endocrine disrupting properties

Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

IATA

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

<u>IMDG</u>

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14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions

14.7 Maritime transport in bulk No information available according to IMO instruments

None

RID

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special precautions for user

Special Provisions None

<u>ADR</u>

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special precautions for user

Special Provisions None

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Chloroform	RG 12	-
67-66-3		

Netherlands

Chemical name	Netherlands - List of	Netherlands - List of	Netherlands - List of
	Carcinogens	Mutagens	Reproductive Toxins
Chloroform	1	•	Development Category 2

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

	<u></u>		
Chemical name	Restricted substance per REACH	Substance subject to authorisation per	
	Annex XVII	REACH Annex XIV	
Chloroform - 67-66-3	Use restricted. See entry 32.	-	
	Use restricted. See entry 75.		
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	Use restricted. See entry 75.	-	
2-methyl-3(2H)-isothiazolone - 55965-84-9			

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Persistent Organic Pollutants

Not applicable

Export Notification requirements

This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 689/2008 - Annex Number
Chloroform - 67-66-3	l.1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

ological i roducto Regulation (EG) No CEG/EG E (B) R)		
Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)	
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	Product-type 2: Disinfectants and algaecides not intended	
2-methyl-3(2H)-isothiazolone - 55965-84-9	for direct application to humans or animals Product-type 4:	
	Food and feed area Product-type 6: Preservatives for	
	products during storage Product-type 11: Preservatives for	
	liquid-cooling and processing systems Product-type 12:	
	Slimicides Product-type 13: Working or cutting fluid	
	preservatives	

EU - Water Framework Directive (2000/60/EC)

Chemical name	EU - Water Framework Directive (2000/60/EC)
Chloroform - 67-66-3	Priority substance

EU - Environmental Quality Standards (2008/105/EC)

Chemical name	EU - Environmental Quality Standards (2008/105/EC)
Chloroform - 67-66-3	Priority substance

International Inventories Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H351 - Suspected of causing cancer

H361d - Suspected of damaging the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

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H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ceiling Maximum limit value Sk* Skin designation

Classification procedure		
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used	
Acute oral toxicity	Calculation method	
Acute dermal toxicity	Calculation method	
Acute inhalation toxicity - gas	Calculation method	
Acute inhalation toxicity - vapour	Calculation method	
Acute inhalation toxicity - dust/mist	Calculation method	
Skin corrosion/irritation	Calculation method	
Serious eye damage/eye irritation	Calculation method	
Respiratory sensitisation	Calculation method	
Skin sensitisation	Calculation method	
Mutagenicity	Calculation method	
Carcinogenicity	Calculation method	
Reproductive toxicity	Calculation method	
STOT - single exposure	Calculation method	
STOT - repeated exposure	Calculation method	
Acute aquatic toxicity	Calculation method	
Chronic aquatic toxicity	Calculation method	
Aspiration hazard	Calculation method	
Ozone	Calculation method	
Health hazards not otherwise classified (HHNOC)	Calculation method	

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)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

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)

National Institute of Technology and Evaluation (NITE)

Australian 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)

U.S. National Toxicology Program (NTP)

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

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

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

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

World Health Organization

Revision Note Significant changes throughout SDS. Review all sections.

Revision date 06-Aug-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

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End of Safety Data Sheet

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