# KIT SAFETY DATA SHEET



Kit Product Name Platelia Rubella IgG (96 tests)

Kit Catalogue Number(s) 72850

Revision date 22-Jan-2024

# **Kit Contents**

Catalogue Number(s)	Product Name
620585	R9 - Chromogen TMB (28 ml)
7360J, 5180U, 7361H	R10 - Stopping Solution, 28 ml
7361A, 7360S, 7360Z	R2 - 20 x Conc. Washing Solution, 70 ml
7250A	R1 - Microplate
7250B	R3 - Calibrator 0 (0.75 ml)
7250C	R4a - Calibrator 15 (0.75 ml)
7250D	R4b - Calibrator 60 (0.75 ml)
7250E	R4c - Calibrator 200 (0.75 ml)
7250F	R6 - Conjugate (51x), 0.7 ml
7250G	R7 - Diluent (80ml)

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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 22-Jan-2024 **Revision Number** 1.2

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

1.1. Product identifier

**Product Name** R9 - Chromogen TMB (28 ml)

Catalogue Number(s) 620585

**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. Bio-Rad

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

France

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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

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

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## R9 - Chromogen TMB (28 ml)

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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

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

Consult a doctor.

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

water.

**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

# **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

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R9 - Chromogen TMB (28 ml)

Revision date 22-Jan-2024

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.

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**

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## 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.

(PNEC)

8.2. Exposure controls

Personal protective equipment

**Eye/face protection** No special protective equipment required.

**Skin and body protection**No special protective equipment required.

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.

None known

**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 aqueous solution
Colour light yellow
Odour Odourless.

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 102 °C

Autoignition temperatureNo data availableNone knownDecomposition temperatureNone known

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

Kinematic viscosity

No data available

None known

Dynamic viscosity
Water solubility
No data available
Miscible in water

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone known

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## R9 - Chromogen TMB (28 ml)

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Vapour pressureNo data availableNone knownRelative densityNo data availableNone known

Relative density

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.

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

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

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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** This product does not contain any known or suspected endocrine disruptors.

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.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability No information available.

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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** No information available.

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 numberNot regulated14.2 UN proper shipping nameNot regulated14.3 Transport hazard class(es)Not regulated

**14.4 Packing group 14.5 Environmental hazards**Not regulated
Not applicable

14.6 Special Precautions for Users

Special Provisions None

IMDG

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

14.6 Special Precautions for Users

Special Provisions None

**14.7** Maritime transport in bulk No information available

according to IMO instruments

RID

14.1 UN number
Not regulated
Not regulated
Not regulated
Not regulated
Not regulated
Not regulated

14.4 Packing group

14.5 Environmental hazards

Not regulated

Not applicable

14.6 Special Precautions for Users

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 Users

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) non-hazardous to water (nwg)

## **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

Leaend

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 \* 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

## 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)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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 04-Jan-2024 Revision Number 1.3

## 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

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

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France

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**Legal Entity / Contact Address** 

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UK

Bio-Rad Laboratories Pvt. Ltd.

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122005 Haryana India

Bio-Rad Laboratories (Pty) Ltd.

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Parkwood, Johannesburg 2193

South Africa

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

## **SECTION 2: Hazards identification**

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## 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 1 - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)

## 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

# **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)		
Sulfuric acid	2.5 - 5	No data available	(016-020-00	Skin Corr. 1A (H314)	Eye Irrit. 2 ::	-	-
7664-93-9			-8)	Eye Dam. 1 (H318)	5%<=C<15%		
			231-639-5		Skin Corr. 1A ::		
					C>=15%		
					Skin Irrit. 2 ::		
					5%<=C<15%		

## 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

-1	Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
-1			mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
	Sulfuric acid	2140	No data available	Inhalation LC50 Rat	0.375	Inhalation LC50 Rat

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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
7664-93-9		0.375 mg/L 4 h (aerosol, Source: OECD_SIDS) 0.375		0.375 mg/L 4 h (aerosol, Source: OECD_SIDS)

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. Get immediate medical

attention.

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.

**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. 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.

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.

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## 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 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 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

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

materials. 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	Euro	pean Union	Austria	Belgium	Bu	Igaria	Croatia
Sulfuric acid	TWA	: 0.05 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0	0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9			STEL 0.2 mg/m <sup>3</sup>				
Chemical name		Cyprus	Czech Republic	Denmark	Es	stonia	Finland
Sulfuric acid	TWA	: 0.05 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0	0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9			TWA: 0.05 mg/m <sup>3</sup>	STEL: 0.1 mg/m <sup>3</sup>			STEL: 0.1 mg/m <sup>3</sup>
			Ceiling: 2 mg/m <sup>3</sup>	thoracic fraction			
Chemical name		France	Germany TRGS	Germany DFG	Gı	reece	Hungary
Sulfuric acid	TWA	: 0.05 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0	0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9				Peak: 0.1 mg/m <sup>3</sup>			
Chemical name		Ireland	Italy MDLPS	Italy AIDII	L	atvia	Lithuania
Sulfuric acid	TW	4: 0.05 ppm	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0	0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9	STE	L: 0.15 ppm					STEL: 3 mg/m <sup>3</sup>
Chemical name	Lu	xembourg	Malta	Netherlands	No	orway	Poland
Sulfuric acid	TWA	: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: (	0.1 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9		-			STEL:	0.3 mg/m <sup>3</sup>	
Chemical name		Portugal	Romania	Slovakia	Slo	ovenia	Spain
Sulfuric acid	TWA	A: 0.2 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0	0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
7664-93-9		-			STEL: (	0.05 mg/m <sup>3</sup>	
Chemical name		Sı	weden	Switzerland		Uni	ted Kingdom
Sulfuric acid	_	NGV:	0.1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>		TWA	\: 0.05 mg/m <sup>3</sup>
7664-93-9		Vägledande	KGV: 0.2 mg/m <sup>3</sup>	STEL: 0.2 mg/m <sup>3</sup>		STE	L: 0.15 mg/m <sup>3</sup>

## **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.

**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

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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.

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

nH

oH < 2

**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

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**

10.1. Reactivity

**Reactivity** No information available.

10.2. Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

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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. May cause irreversible damage to eyes.

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

components). Causes burns.

**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** 

No information available

## **Component Information**

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

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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. Causes

burns.

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 This product does not contain any known or suspected endocrine disruptors.

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.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sulfuric acid	- LC50: >500 Brachyda		-	-

## 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

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\_\_\_\_\_

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
Sulfuric acid	The substance is not PBT / vPvB

#### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

#### 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**

ΑΤΑ

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 Users

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) 8

14.4 Packing group

**Description** UN2796, SULPHURIC ACID SOLUTION, 8, II

14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

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

**14.7 Maritime transport in bulk** No information available

according to IMO instruments

RID

**14.1 UN 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

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14.6 Special Precautions for Users

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 Users

Special ProvisionsNoneClassification codeC1Tunnel 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	75.	-

## **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

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## **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 \* 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)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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

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Revision Note Significant changes throughout SDS. Review all sections

Revision date 04-Jan-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 22-Jan-2024 **Revision Number** 1.2

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

1.1. Product identifier

R2 - 20 x Conc. Washing Solution, 70 ml **Product Name** 

Catalogue Number(s) 7361A, 7360S, 7360Z

**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 Headquarters** Manufacturer Bio-Rad Laboratories Inc. Bio-Rad

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

France

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

**Legal Entity / Contact Address** 

Bio-Rad Laboratories Ltd

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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

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

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Page 23 / 114 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]

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

#### 2.3. Other hazards

# **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]		M-Factor	M-Factor (long-term)
Sodium chloride 7647-14-5	20 - 35	No data available	231-598-3	No data available	ı	-	1
Hydrochloric acid 7647-01-0	0.3 - 0.99	No data available	(017-002-00 -2) 231-595-7	Eye Irrit. 2 (H319)	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	No data 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 :: 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
Sodium chloride 7647-14-5	3000	10000	Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source:	>42	Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source:

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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
			ECHA_API)		ECHA_API)
Hydrochloric acid 7647-01-0	238	5010	Inhalation LC50 Rat 1.68 mg/L 1 h (mist, Source: JAPAN_GHS)	1.68	Inhalation LC50 Rat 1.68 mg/L 1 h (mist, Source: JAPAN_GHS) 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 contact In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and

water.

**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

# **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 No information available.

chemical

5.3. Advice for firefighters

**Special protective equipment and** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

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# **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

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 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.

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
Hydrochloric acid	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm	STEL: 10 ppm	TWA: 5 ppm
7647-01-0	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	STEL: 15.0 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>
	STEL: 10 ppm	STEL 10 ppm	STEL: 10 ppm	TWA: 5 ppm	STEL: 10 ppm
	STEL: 15 mg/m <sup>3</sup>	STEL 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	TWA: 8.0 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
5-Chloro-2-methyl-3(2H)-i	-	TWA: 0.05 mg/m <sup>3</sup>	-	-	-
sothiazolone, mixture with		Sh+			
2-methyl-3(2H)-isothiazol					
one					

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55965-84-9							
Chemical name		Cyprus	Czech Republic	Denmark	Es	tonia	Finland
Hydrochloric acid	STI	EL: 10 ppm	TWA: 8 mg/m <sup>3</sup>	STEL: 5 ppm	TWA	: 5 ppm	STEL: 5 ppm
7647-01-0	STE	L: 15 mg/m <sup>3</sup>	Ceiling: 15 mg/m <sup>3</sup>	STEL: 8 mg/m <sup>3</sup>		8 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>
		VA: 5 ppm				: 10 ppm	
	TW	A: 8 mg/m <sup>3</sup>				15 mg/m <sup>3</sup>	
Chemical name		France	Germany TRGS	Germany DFG	٠.	eece	Hungary
Hydrochloric acid		EL: 5 ppm	TWA: 2 ppm	TWA: 2 ppm		: 5 ppm	TWA: 8 mg/m <sup>3</sup>
7647-01-0	STE	L: 7.6 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3.0 mg/m <sup>3</sup>		7 mg/m <sup>3</sup>	STEL: 16 mg/m <sup>3</sup>
				Peak: 4 ppm		.: 5 ppm	
				Peak: 6 mg/m <sup>3</sup>		7 mg/m <sup>3</sup>	
Chemical name		Ireland	Italy MDLPS	Italy AIDII		atvia	Lithuania
Sodium chloride		-	-	-	TWA:	5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
7647-14-5							
Hydrochloric acid		A: 8 mg/m <sup>3</sup>	TWA: 5 ppm	Ceiling: 2 ppm		: 5 ppm	TWA: 5 ppm
7647-01-0		VA: 5 ppm	TWA: 8 mg/m <sup>3</sup>	Ceiling: 2.9 mg/m <sup>3</sup>		8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>
		EL: 10 ppm	STEL: 10 ppm			: 10 ppm	STEL: 10 ppm
		L: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	NI di li li		15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
Chemical name		xembourg	Malta	Netherlands		rway	Poland
Hydrochloric acid		EL: 10 ppm	STEL: 10 ppm	TWA: 8 mg/m <sup>3</sup>		g: 5 ppm	STEL: 10 mg/m <sup>3</sup>
7647-01-0		L: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	Celling	: 7 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
		VA: 5 ppm 'A: 8 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 8 mg/m <sup>3</sup>				
Chemical name		Portugal	Romania	Slovakia	Slo	venia	Spain
Hydrochloric acid		VA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm		: 5 ppm	TWA: 5 ppm
7647-01-0		A: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8.0 mg/m <sup>3</sup>		. 5 ррпі 8 mg/m <sup>3</sup>	TWA: 7.6 mg/m <sup>3</sup>
7047-01-0		EL: 10 ppm	STEL: 10 ppm	Ceiling: 15 mg/m <sup>3</sup>		: 10 ppm	STEL: 10 ppm
		L: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	Celling. 15 mg/m		15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
		ling: 2 ppm	OTEL: 10 mg/m		OTEL.	10 1119/111	OTEL: 10 mg/m
Chemical name	00.		weden	Switzerland		Uni	ted Kingdom
Hydrochloric acid		NG\	/: 2 ppm	TWA: 2 ppm			WA: 1 ppm
7647-01-0			: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>		TV	VA: 2 mg/m <sup>3</sup>
			KGV: 4 ppm	STEL: 4 ppm			TEL: 5 ppm
		Bindande	KGV: 6 mg/m <sup>3</sup>	STEL: 6 mg/m <sup>2</sup>	3	ST	EL: 8 mg/m <sup>3</sup>
5-Chloro-2-methyl-3(2H)-isothia			-	S+			-
zolone, mixture with				TWA: 0.2 mg/m			
2-methyl-3(2H)-isothiazo	lone			STEL: 0.4 mg/m	1 <sup>3</sup>		
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** No special protective equipment required.

**Skin and body protection**No special protective equipment required.

**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.

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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** aqueous solution Colour colourless Odour Odourless.

**Odour threshold** No information available

**Property** Values Remarks • Method

Melting point / freezing point No data available None known

Initial boiling point and boiling range100 °C

None known **Flammability** No data available Flammability Limit in Air None 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** None known

pН

7.4

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

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

Miscible in water Water solubility

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

No data available **Bulk density 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

No information available. Reactivity

10.2. Chemical stability

Stable under normal conditions. Stability

**Explosion data** 

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

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## 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** 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

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

**ATEmix (oral)** 11,155.50 mg/kg

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium chloride	= 3 g/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
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.

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**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 This product does not contain any known or suspected endocrine disruptors.

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.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

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,		
		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.

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## 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

**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	The substance is not PBT / vPvB	
2-methyl-3(2H)-isothiazolone		

## 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

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

14.6 Special Precautions for Users

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 Users

Special Provisions None

14.7 Maritime transport in bulk No information available

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#### according to IMO instruments

RID

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

14.6 Special Precautions for Users

Special Provisions None

<u>ADR</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 applicable

14.6 Special Precautions for Users

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
Hydrochloric acid - 7647-01-0	75.	-
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	75.	-
2-methyl-3(2H)-isothiazolone - 55965-84-9		

#### **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)
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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
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

## 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 \* 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

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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)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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 22-Jan-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

Catalogue Number(s) 7250A

**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. Bio-Rad

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

France

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

**Legal Entity / Contact Address** 

Bio-Rad Laboratories Ltd 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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

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

# **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

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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

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

water.

**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

**Note to doctors**Treat symptomatically.

# **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

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

surrounding environment.

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

**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.

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** 

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 protection**No special protective equipment required.

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

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

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

**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

<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 None known

pH (as aqueous solution)

Kinematic viscosity

Dynamic viscosity

No data available

No data available

No data available

None known

No data available

None known

Water solubility Insoluble 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

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**Liquid Density** Relative vapour density Particle characteristics

No data available No data available

None known

**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

No information available. Reactivity

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

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

None known based on information supplied. Incompatible materials

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.

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

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

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

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

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#### 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** This product does not contain any known or suspected endocrine disruptors.

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.

**Unknown aquatic toxicity**Contains 100 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

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#### 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** No information available.

#### 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	<b>UN proper shipping name</b>	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 Users

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 Users

Special Provisions None

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

### <u>RID</u>

14.1	UN 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 Users

Special Provisions None

#### **ADR**

**14.1 UN number or ID number** Not regulated

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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 Users

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

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 \* 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

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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)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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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# 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 22-Jan-2024 Revision Number 1.1

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

1.1. Product identifier

Product Name R3 - Calibrator 0 (0.75 ml)

Catalogue Number(s) 7250B

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 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 HeadquartersManBio-Rad Laboratories Inc.Bio-

1000 Alfred Nobel Drive 3 b Hercules, CA 94547 924

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** 

Bio-Rad Laboratories Ltd

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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

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

### **SECTION 2: Hazards identification**

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### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitisation	Category 1A - (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. (Horse).

# **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)		
5-Chloro-2-methyl-3	0.001 -	No data 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 ::		
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

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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

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
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

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

Inhalation Remove to fresh air.

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

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

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

surrounding environment.

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

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

chemical

5.3. Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Special protective equipment and precautions for fire-fighters

Use personal protection equipment.

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### **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** 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 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** 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 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	European Union	Austria	Belgium	Bulgaria	Croatia
5-Chloro-2-methyl-3(2H)-i	-	TWA: 0.05 mg/m <sup>3</sup>	=	=	=
sothiazolone, mixture with		Sh+			
2-methyl-3(2H)-isothiazol					

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one 55965-84-9					
Chemical name	Swe	eden	Switzerland		United Kingdom
5-Chloro-2-methyl-3(2H)-isoth zolone, mixture with		-	S+ TWA: 0.2 mg/m		-
2-methyl-3(2H)-isothiazolono 55965-84-9	<b>)</b>		STEL: 0.4 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** 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 stateLiquidAppearanceLiquidColouryellowOdourOdourless.

Odour threshold No information available

Property Values Remarks • Method

Melting point / freezing point No data available None known 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 No data available None known

Decomposition temperatureNo data availableNone knownNo data availableNone known

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

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Water solubility Immiscible in water

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### R3 - Calibrator 0 (0.75 ml)

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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.

**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

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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
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/irritation**No information available.

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 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** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

### 12.1. Toxicity

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

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

### 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

Mobility in soil No information available.

#### 12.5. Results of PBT and vPvB assessment

#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
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** No information available.

### 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 Users

Special Provisions None

#### **IMDG**

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<ul> <li>14.1 UN number or ID number</li> <li>14.2 UN proper shipping name</li> <li>14.3 Transport hazard class(es)</li> <li>14.4 Packing group</li> <li>14.5 Environmental hazards</li> <li>14.6 Special Precautions for Users Special Provisions</li> <li>14.7 Maritime transport in bulk according to IMO instruments</li> </ul>	Not regulated Not regulated Not regulated Not regulated Not applicable  None No information available
RID 14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special Precautions for Users Special Provisions	Not regulated Not regulated Not regulated Not regulated Not regulated Not applicable 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 14.6 Special Precautions for Users Special Provisions	Not regulated Not regulated Not regulated Not regulated Not regulated Not applicable 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)

	The product contains one of more capataneo(c) capacities rectioned (regulation (20) rec. rect/2000 (12/10/1), rumox xxx i)						
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	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)

<u> </u>	
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:

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Slimicides Product-type 13: Working or cutting fluid
preservatives

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

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 \* 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)

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European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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 22-Jan-2024 Revision Number 1.1

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

1.1. Product identifier

Product Name R4a - Calibrator 15 (0.75 ml)

Catalogue Number(s) 7250C

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 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
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** 

Bio-Rad Laboratories Ltd

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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

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

### **SECTION 2: Hazards identification**

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### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitisation	Category 1A - (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. (Horse).

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)		
5-Chloro-2-methyl-3	0.001 -	No data 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::		
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

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Revision date 22-Jan-2024

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
5-Chloro-2-methyl-3(2H)-sothiazolone, mixture with 2-methyl-3(2H)-isothiazolone 55965-84-9	ı	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 doctors May cause sensitisation in susceptible persons. Treat symptomatically. Contains human

source material and / or potentially infectious components.

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

chemical

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 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 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 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.

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
5-Chloro-2-methyl-3(2H)-i	-	TWA: 0.05 mg/m <sup>3</sup>	-	-	-

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sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9		Sh+			
Chemical name	Sı	weden	Switzerland	L	Inited Kingdom
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/m		-

#### **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.

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** 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 stateLiquidAppearanceLiquidColouryellowOdourOdourless.

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 None known

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

Kinematic viscosity No data available None known

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### R4a - Calibrator 15 (0.75 ml)

Revision date 22-Jan-2024

Dynamic viscosity No data available None known

Water solubility Immiscible in water

Solubility(ies)
No data available
None known
Partition coefficient
No data available
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

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 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.

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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
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/irritation**No information available.

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 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** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

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12.1. Toxicity

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

Contains 0 % of components with unknown hazards to the aquatic environment. Unknown aquatic toxicity

#### 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

No information available. Mobility in soil

#### 12.5. Results of PBT and vPvB assessment

#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
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** No information available.

#### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Waste from residues/unused

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

products

Contaminated packaging Do not reuse empty containers.

# **SECTION 14: Transport information**

## IATA

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 Users

None **Special Provisions** 

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#### **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 Users

Special Provisions None

**14.7** Maritime transport in bulk No information available

according to IMO instruments

#### RID

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

14.6 Special Precautions for Users

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 Users

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	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)
	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4:
2-methyr-5(211)-150thla2010116 - 55555-04-5	Food and feed area Product-type 6: Preservatives for

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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

#### 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 \* 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

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European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA API)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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 22-Jan-2024 Revision Number 1.1

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

1.1. Product identifier

Product Name R4b - Calibrator 60 (0.75 ml)

Catalogue Number(s) 7250D

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 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
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** 

Bio-Rad Laboratories Ltd

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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

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

### **SECTION 2: Hazards identification**

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#### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitisation	Category 1A - (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. (Horse).

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)		
5-Chloro-2-methyl-3	0.001 -	No data 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::		
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

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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	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
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9	1	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 doctors May cause sensitisation in susceptible persons. Treat symptomatically. Contains human

source material and / or potentially infectious components.

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

chemical

# 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 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 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 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.

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
5-Chloro-2-methyl-3(2H)-i	-	TWA: 0.05 mg/m <sup>3</sup>	-	-	-

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sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one		Sh+				
55965-84-9						
Chemical name	Sı	weden	Switzerland		Uni	ted Kingdom
5-Chloro-2-methyl-3(2H)-isothia		-	S+			-
zolone, mixture with			TWA: 0.2 mg/m	13		
2-methyl-3(2H)-isothiazolone			STEL: 0.4 mg/m	1 <sup>3</sup>		
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.

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** 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 stateLiquidAppearanceLiquidColouryellowOdourOdourless.

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 None known

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

Kinematic viscosity

No data available

None known

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### R4b - Calibrator 60 (0.75 ml)

Revision date 22-Jan-2024

Dynamic viscosity No data available None known

Water solubility Immiscible 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.

**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.

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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
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/irritation No information available.

No information available. Serious eye damage/eye irritation

Respiratory or skin sensitisation May cause an allergic skin reaction.

No information available. Germ cell mutagenicity

Carcinogenicity No information available.

No information available. Reproductive toxicity

No information available. STOT - single exposure

No information available. STOT - repeated exposure

**Aspiration hazard** No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

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12.1. Toxicity

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

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

### 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

Mobility in soil No information available.

### 12.5. Results of PBT and vPvB assessment

#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
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** No information available.

#### 12.7. Other adverse effects

No information available.

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Waste from residues/unused products

env

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>

14.1UN 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 Users

Special Provisions None

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#### **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 Users

Special Provisions None

**14.7 Maritime transport in bulk** No information available

according to IMO instruments

#### RID

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

14.6 Special Precautions for Users

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 regulated
Not applicable

14.6 Special Precautions for Users

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	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)
	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4:
2-methyr-5(211)-150thla2010116 - 55555-04-5	Food and feed area Product-type 6: Preservatives for

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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

#### 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 \* 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

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European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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 22-Jan-2024 Revision Number 1.1

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

1.1. Product identifier

Product Name R4c - Calibrator 200 (0.75 ml)

Catalogue Number(s) 7250E

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 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 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

Bio-Rad Laboratories Ltd

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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

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

### **SECTION 2: Hazards identification**

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### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitisation	Category 1A - (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. (Horse).

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)		
5-Chloro-2-methyl-3	0.001 -	No data 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::		
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

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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	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
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 doctors May cause sensitisation in susceptible persons. Treat symptomatically. Contains human

source material and / or potentially infectious components.

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

chemical

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 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 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 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.

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
5-Chloro-2-methyl-3(2H)-i	-	TWA: 0.05 mg/m <sup>3</sup>	-	-	-

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sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9		Sh+		
Chemical name	Sı	weden	Switzerland	United Kingdom
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/m	-

#### 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.

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** 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 stateLiquidAppearanceLiquidColouryellowOdourOdourless.

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 None known

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

Kinematic viscosity No data available None known

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### R4c - Calibrator 200 (0.75 ml)

Revision date 22-Jan-2024

Dynamic viscosity No data available None known

Water solubility Immiscible 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.

**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.

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

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
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/irritation**No information available.

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 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** This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

### **SECTION 12: Ecological information**

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12.1. Toxicity

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

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

### 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

Mobility in soil No information available.

### 12.5. Results of PBT and vPvB assessment

#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
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** No information available.

#### 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>

14.1UN 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 Users

Special Provisions None

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#### **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 Users

Special Provisions None

**14.7 Maritime transport in bulk** No information available

according to IMO instruments

#### RID

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

14.6 Special Precautions for Users

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 Users

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.

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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	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)
	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4:
2-methyr-5(211)-150thla2010116 - 55555-04-5	Food and feed area Product-type 6: Preservatives for

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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

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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 \* 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

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\_\_\_\_

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA API)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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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# 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 22-Jan-2024 Revision Number 1.2

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

1.1. Product identifier

**Product Name** R6 - Conjugate (51x), 0.7 ml

Catalogue Number(s) 7250F

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 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
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** 

Bio-Rad Laboratories Ltd

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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

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

### **SECTION 2: Hazards identification**

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### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitisation	Category 1A - (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

## **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.	Specific concentration	M-Factor	M-Factor (long-term)
		number	index (vo)	1272/2008 [CLP]	limit (SCL)		(long-term)
1,2,3-Propanetriol 56-81-5	20 - 35	No data available	200-289-5	No data available	-	-	-
Ethyl alcohol 64-17-5	0.3 - 0.99	No data available	(603-002-00 -5) 200-578-6	Flam. Liq. 2 (H225)	-	-	-
Sodium chloride 7647-14-5	0.3 - 0.99	No data available	231-598-3	No data available	-	-	-
5-Chloro-2-methyl-3 (2H)-isothiazolone, mixture with 2-methyl-3(2H)-isoth iazolone 55965-84-9	0.01	No data 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		100

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				(H410)	:: C>=0.0015% Eye Dam. 1 :: C>=0.6%		
Hydrochloric acid 7647-01-0	0.001 - 0.01	No data available	(017-002-00 -2) 231-595-7	Eye Irrit. 2 (H319)	Eye Irrit. 2 :: 1%<=C<3% 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

### **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	Inhalation LC50 - 4	Inhalation LC50 - 4
		mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
1,2,3-Propanetriol 56-81-5	12600	10000	Inhalation LC50 Rat >2.75 mg/L 4 h (condensation aerosol, Source: ECHA) 2.75	>2.75	Inhalation LC50 Rat >2.75 mg/L 4 h (condensation aerosol, Source: ECHA)
Ethyl alcohol 64-17-5	7060	No data available	Inhalation LC50 Rat 116.9 mg/L 4 h (males, vapor, Source: ECHA_API); Inhalation LC50 Rat 133.8 mg/L 4 h (females, vapor, Source: ECHA_API) 116.9 133.8	116.9 133.8	Inhalation LC50 Rat 116.9 mg/L 4 h (males, vapor, Source: ECHA_API); Inhalation LC50 Rat 133.8 mg/L 4 h (females, vapor, Source: ECHA_API)
Sodium chloride 7647-14-5	3000	10000	Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: ECHA_API)	>42	Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: ECHA_API)
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
Hydrochloric acid 7647-01-0	238	5010	Inhalation LC50 Rat 1.68 mg/L 1 h (mist, Source: JAPAN_GHS)	1.68	Inhalation LC50 Rat 1.68 mg/L 1 h (mist, Source: JAPAN_GHS) 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** Show this safety data sheet to the doctor in attendance.

**Inhalation** Remove to fresh air.

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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

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

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

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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** 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 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	European Union	Austria	Belgium	Bulgaria	Croatia
1,2,3-Propanetriol	-	-	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
56-81-5					
Ethyl alcohol	-	TWA: 1000 ppm	TWA: 1000 ppm	TWA: 1000 mg/m <sup>3</sup>	TWA: 1000 ppm
64-17-5		TWA: 1900 mg/m <sup>3</sup>	TWA: 1907 mg/m <sup>3</sup>		TWA: 1900 mg/m <sup>3</sup>
		STEL 2000 ppm			
		STEL 3800 mg/m <sup>3</sup>			
5-Chloro-2-methyl-3(2H)-i	-	TWA: 0.05 mg/m <sup>3</sup>	-	-	-
sothiazolone, mixture with		Sh+			
2-methyl-3(2H)-isothiazol					
one					
55965-84-9					
Hydrochloric acid	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm	STEL: 10 ppm	TWA: 5 ppm
7647-01-0	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	STEL: 15.0 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>
	STEL: 10 ppm	STEL 10 ppm	STEL: 10 ppm	TWA: 5 ppm	STEL: 10 ppm
	STEL: 15 mg/m <sup>3</sup>	STEL 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	TWA: 8.0 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
1,2,3-Propanetriol	-	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>	TWA: 20 mg/m <sup>3</sup>
56-81-5		Ceiling: 15 mg/m <sup>3</sup>			
Ethyl alcohol	-	TWA: 1000 mg/m <sup>3</sup>	TWA: 1000 ppm	TWA: 500 ppm	TWA: 1000 ppm
64-17-5		Ceiling: 3000 mg/m <sup>3</sup>	TWA: 1900 mg/m <sup>3</sup>	TWA: 1000 mg/m <sup>3</sup>	TWA: 1900 mg/m <sup>3</sup>
			STEL: 2000 ppm	STEL: 1000 ppm	STEL: 1300 ppm
			STEL: 3800 mg/m <sup>3</sup>	STEL: 1900 mg/m <sup>3</sup>	STEL: 2500 mg/m <sup>3</sup>
Hydrochloric acid	STEL: 10 ppm	TWA: 8 mg/m <sup>3</sup>	STEL: 5 ppm	TWA: 5 ppm	STEL: 5 ppm
7647-01-0	STEL: 15 mg/m <sup>3</sup>	Ceiling: 15 mg/m <sup>3</sup>	STEL: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>
	TWA: 5 ppm			STEL: 10 ppm	
	TWA: 8 mg/m <sup>3</sup>			STEL: 15 mg/m <sup>3</sup>	
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
1,2,3-Propanetriol	TWA: 10 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-

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50.04.5	<u> </u>		Da als: 400 mas/ma3		
56-81-5	TIMA 4000	T)4/4 000	Peak: 400 mg/m <sup>3</sup>	T14/4 4000	TIMA 4000 / 3
Ethyl alcohol	TWA: 1000 ppm	TWA: 200 ppm	TWA: 200 ppm	TWA: 1000 ppm	TWA: 1900 mg/m <sup>3</sup>
64-17-5	TWA: 1900 mg/m <sup>3</sup>	TWA: 380 mg/m <sup>3</sup>	TWA: 380 mg/m <sup>3</sup>	TWA: 1900 mg/m <sup>3</sup>	STEL: 3800 mg/m <sup>3</sup>
	STEL: 5000 ppm		Peak: 800 ppm		
I badas ablasia a sid	STEL: 9500 mg/m <sup>3</sup>	T)/// . O	Peak: 1520 mg/m <sup>3</sup>	T\\\/ \\ . \ \ \ . \ \ \ \ \ \ \ \ \ \ \	T\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Hydrochloric acid	STEL: 5 ppm	TWA: 2 ppm	TWA: 2 ppm	TWA: 5 ppm	TWA: 8 mg/m <sup>3</sup>
7647-01-0	STEL: 7.6 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3.0 mg/m <sup>3</sup>	TWA: 7 mg/m <sup>3</sup>	STEL: 16 mg/m <sup>3</sup>
			Peak: 4 ppm	STEL: 5 ppm	
			Peak: 6 mg/m <sup>3</sup>	STEL: 7 mg/m <sup>3</sup>	
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Ethyl alcohol	STEL: 1000 ppm	-	STEL: 1000 ppm	TWA: 1000 mg/m <sup>3</sup>	
64-17-5			STEL: 1884 mg/m <sup>3</sup>		TWA: 1000 mg/m <sup>3</sup>
					STEL: 1000 ppm
					STEL: 1900 mg/m <sup>3</sup>
Sodium chloride	-	-	-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
7647-14-5					
Hydrochloric acid	TWA: 8 mg/m <sup>3</sup>	TWA: 5 ppm	Ceiling: 2 ppm	TWA: 5 ppm	TWA: 5 ppm
7647-01-0	TWA: 5 ppm	TWA: 8 mg/m <sup>3</sup>	Ceiling: 2.9 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>
	STEL: 10 ppm	STEL: 10 ppm		STEL: 10 ppm	STEL: 10 ppm
	STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>		STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
1,2,3-Propanetriol	-	-	-	-	TWA: 10 mg/m <sup>3</sup>
56-81-5					
Ethyl alcohol	-	-	TWA: 260 mg/m <sup>3</sup>	TWA: 500 ppm	TWA: 1900 mg/m <sup>3</sup>
64-17-5			STEL: 1900 mg/m <sup>3</sup>	TWA: 950 mg/m <sup>3</sup>	
			H*	STEL: 625 ppm	
				STEL: 1187.5 mg/m	3
Hydrochloric acid	STEL: 10 ppm	STEL: 10 ppm	TWA: 8 mg/m <sup>3</sup>	Ceiling: 5 ppm	STEL: 10 mg/m <sup>3</sup>
7647-01-0	STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	Ceiling: 7 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
	TWA: 5 ppm	TWA: 5 ppm			
	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>			
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
1,2,3-Propanetriol	TWA: 10 mg/m <sup>3</sup>	-	TWA: 11 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
56-81-5				STEL: 400 mg/m <sup>3</sup>	
Ethyl alcohol	STEL: 1000 ppm	TWA: 1000 ppm	TWA: 500 ppm	TWA: 960 mg/m <sup>3</sup>	STEL: 1000 ppm
64-17-5		TWA: 1900 mg/m <sup>3</sup>	TWA: 960 mg/m <sup>3</sup>	TWA: 500 ppm	STEL: 1910 mg/m <sup>3</sup>
		STEL: 5000 ppm	Ceiling: 1920 mg/m <sup>3</sup>	STEL: 1000 ppm	
		STEL: 9500 mg/m <sup>3</sup>		STEL: 1920 mg/m <sup>3</sup>	
Hydrochloric acid	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm
7647-01-0	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8.0 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 7.6 mg/m <sup>3</sup>
					OTEL: 40
1	STEL: 10 ppm	STEL: 10 ppm	Ceiling: 15 mg/m <sup>3</sup>	STEL: 10 ppm	STEL: 10 ppm
	STEL: 10 ppm STEL: 15 mg/m <sup>3</sup>	STEL: 10 ppm STEL: 15 mg/m³	Ceiling: 15 mg/m <sup>3</sup>	STEL: 10 ppm STEL: 15 mg/m <sup>3</sup>	STEL: 10 ppm STEL: 15 mg/m <sup>3</sup>
	STEL: 15 mg/m <sup>3</sup> Ceiling: 2 ppm	STEL: 15 mg/m <sup>3</sup>	Ceiling: 15 mg/m³		
Chemical name	STEL: 15 mg/m <sup>3</sup> Ceiling: 2 ppm		Switzerland	STEL: 15 mg/m³	STEL: 15 mg/m³ nited Kingdom
Chemical name 1,2,3-Propanetriol	STEL: 15 mg/m <sup>3</sup> Ceiling: 2 ppm	STEL: 15 mg/m <sup>3</sup>	Switzerland TWA: 50 mg/m	STEL: 15 mg/m <sup>3</sup> Ur  T\	STEL: 15 mg/m³  nited Kingdom  VA: 10 mg/m³
	STEL: 15 mg/m <sup>3</sup> Ceiling: 2 ppm	STEL: 15 mg/m <sup>3</sup>	Switzerland	STEL: 15 mg/m <sup>3</sup> Ur  T\	STEL: 15 mg/m³ nited Kingdom
1,2,3-Propanetriol	STEL: 15 mg/m³ Ceiling: 2 ppm St	STEL: 15 mg/m³  weden  500 ppm	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm	STEL: 15 mg/m³  Ur  3 T\ n³ ST	STEL: 15 mg/m³  nited Kingdom  VA: 10 mg/m³  EL: 30 mg/m³  VA: 1000 ppm
1,2,3-Propanetriol 56-81-5	STEL: 15 mg/m³ Ceiling: 2 ppm St	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m	STEL: 15 mg/m³  Ur  T T  n³ ST  TV  TV  N³ TW	STEL: 15 mg/m³  nited Kingdom  VA: 10 mg/m³  EL: 30 mg/m³  VA: 1000 ppm  A: 1920 mg/m³
1,2,3-Propanetriol 56-81-5 Ethyl alcohol	STEL: 15 mg/m³ Ceiling: 2 ppm St	STEL: 15 mg/m³  weden  500 ppm	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm	STEL: 15 mg/m³  Ur  T T  n³ ST  TV  TV  N³ TW	STEL: 15 mg/m³  nited Kingdom  VA: 10 mg/m³  EL: 30 mg/m³  VA: 1000 ppm
1,2,3-Propanetriol 56-81-5 Ethyl alcohol	STEL: 15 mg/m³ Ceiling: 2 ppm St NGV: NGV: 1 Vägledande	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m	STEL: 15 mg/m³  Ur  3 T\ n³ ST  TV n³ TW n ST	STEL: 15 mg/m³  nited Kingdom  VA: 10 mg/m³  EL: 30 mg/m³  VA: 1000 ppm  A: 1920 mg/m³
1,2,3-Propanetriol 56-81-5 Ethyl alcohol	STEL: 15 mg/m³ Ceiling: 2 ppm St NGV: 1 Vägledande Vägledande I	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³ KGV: 1000 ppm	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m STEL: 1000 ppr STEL: 1920 mg/n	STEL: 15 mg/m³  Ur  3 T\ n³ ST  1 TW n° ST m³ STE	STEL: 15 mg/m³ hited Kingdom NA: 10 mg/m³ FEL: 30 mg/m³ VA: 1000 ppm A: 1920 mg/m³ FEL: 3000 ppm
1,2,3-Propanetriol 56-81-5 Ethyl alcohol 64-17-5	STEL: 15 mg/m³ Ceiling: 2 ppm  NGV: NGV: 1 Vägledande Vägledande I	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³ KGV: 1000 ppm	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m STEL: 1000 ppr STEL: 1920 mg/r	STEL: 15 mg/m³  Ur  3 T\ n³ ST  1 TW n° ST m³ STE	STEL: 15 mg/m³ hited Kingdom NA: 10 mg/m³ FEL: 30 mg/m³ VA: 1000 ppm A: 1920 mg/m³ FEL: 3000 ppm
1,2,3-Propanetriol 56-81-5 Ethyl alcohol 64-17-5  5-Chloro-2-methyl-3(2H)-i	STEL: 15 mg/m³ Ceiling: 2 ppm  NGV: NGV: 1 Vägledande Vägledande I	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³ KGV: 1000 ppm	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m STEL: 1000 ppr STEL: 1920 mg/n	STEL: 15 mg/m³  Ur  3 T\  13 ST  TV  13 TW  13 ST  14 ST  15 ST  16 ST  17 ST	STEL: 15 mg/m³ hited Kingdom NA: 10 mg/m³ FEL: 30 mg/m³ VA: 1000 ppm A: 1920 mg/m³ FEL: 3000 ppm
1,2,3-Propanetriol 56-81-5 Ethyl alcohol 64-17-5  5-Chloro-2-methyl-3(2H)-i zolone, mixture with	STEL: 15 mg/m³ Ceiling: 2 ppm  NGV: NGV: 1 Vägledande Vägledande I	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³ KGV: 1000 ppm	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m STEL: 1000 ppr STEL: 1920 mg/n S+ TWA: 0.2 mg/m	STEL: 15 mg/m³  Ur  3 T\  13 ST  TV  13 TW  13 ST  14 ST  15 ST  16 ST  17 ST	STEL: 15 mg/m³ hited Kingdom NA: 10 mg/m³ FEL: 30 mg/m³ VA: 1000 ppm A: 1920 mg/m³ FEL: 3000 ppm
1,2,3-Propanetriol 56-81-5 Ethyl alcohol 64-17-5  5-Chloro-2-methyl-3(2H)-i zolone, mixture with 2-methyl-3(2H)-isothiazo	STEL: 15 mg/m³ Ceiling: 2 ppm  NGV: NGV: 1 Vägledande Vägledande I isothia	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³ KGV: 1000 ppm	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m STEL: 1000 ppr STEL: 1920 mg/n S+ TWA: 0.2 mg/m	STEL: 15 mg/m³  Ur  3 T\  13 ST  TV  13 TW  13 ST  14 ST  15 Mg/m³  TV  16 ST  17 ST  18 ST  18 ST	STEL: 15 mg/m³  nited Kingdom  VA: 10 mg/m³  TEL: 30 mg/m³  VA: 1000 ppm  A: 1920 mg/m³  EL: 3000 ppm  EL: 5760 mg/m³  -
1,2,3-Propanetriol 56-81-5 Ethyl alcohol 64-17-5  5-Chloro-2-methyl-3(2H)-i zolone, mixture with 2-methyl-3(2H)-isothiazo 55965-84-9	STEL: 15 mg/m³ Ceiling: 2 ppm  NGV: NGV: 1 Vägledande Vägledande I isothia nolone  NGV:	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³ KGV: 1000 ppm (GV: 1900 mg/m³  -	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m STEL: 1000 ppr STEL: 1920 mg/n S+ TWA: 0.2 mg/m STEL: 0.4 mg/m	STEL: 15 mg/m³  Ur  3 T\ n³ ST  1 TV n³ ST  m³ ST  n° ST  m³ ST  TV  n° ST  n° ST  TT  TT  TT	STEL: 15 mg/m³  nited Kingdom  VA: 10 mg/m³  TEL: 30 mg/m³  VA: 1000 ppm  A: 1920 mg/m³  EL: 3000 ppm  EL: 5760 mg/m³  -  TWA: 1 ppm  WA: 2 mg/m³
1,2,3-Propanetriol 56-81-5 Ethyl alcohol 64-17-5  5-Chloro-2-methyl-3(2H)-i zolone, mixture with 2-methyl-3(2H)-isothiazo 55965-84-9 Hydrochloric acid	STEL: 15 mg/m³ Ceiling: 2 ppm  NGV: NGV: 1 Vägledande Vägledande I isothia Dlone  NGV NGV	STEL: 15 mg/m³  weden  500 ppm 000 mg/m³ KGV: 1000 ppm (GV: 1900 mg/m³  -	Switzerland TWA: 50 mg/m STEL: 100 mg/n TWA: 500 ppm TWA: 960 mg/m STEL: 1000 ppr STEL: 1920 mg/n S+ TWA: 0.2 mg/m STEL: 0.4 mg/m	STEL: 15 mg/m³  Ur  3 T\ n³ ST  1 TV n³ ST  m³ ST  n° ST  m³ ST  TV  n° ST  n° ST  TT  TT  TT	STEL: 15 mg/m³  nited Kingdom  VA: 10 mg/m³  TEL: 30 mg/m³  VA: 1000 ppm  A: 1920 mg/m³  TEL: 3000 ppm  EL: 5760 mg/m³  -

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

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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.

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

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

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

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 violet
Odour Odourless.

Odour threshold No information available

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

Melting point / freezing point No data available None known

Initial boiling point and boiling range100 °C

Flammability No data available None known Flammability Limit in Air None known

**Upper flammability or explosive** No data available

limits

Lower flammability or explosive No data available

limits

Flash point 160 °C Autoignition temperature 363 °C

Decomposition temperatureNo data availableNone knownPHNo data availableNone known

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

Kinematic viscosity

Dynamic viscosity

No data available

None known

No data available

None known

Water solubility Immiscible 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

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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**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

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# The following values are calculated based on chapter 3.1 of the GHS document 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
Ethyl alcohol	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat)4 h = 133.8 mg/L (Rat)4 h
Sodium chloride	= 3 g/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 )	-
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**No information available.

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 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** This product does not contain any known or suspected endocrine disruptors.

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.

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Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-
Ethyl alcohol	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna)
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
1,2,3-Propanetriol	-1.75
Ethyl alcohol	-0.35
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
1,2,3-Propanetriol	The substance is not PBT / vPvB
Ethyl alcohol	The substance is not PBT / vPvB
Sodium chloride	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	
Hydrochloric acid	The substance is not PBT / vPvB

### 12.6. Endocrine disrupting properties

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**Endocrine disrupting properties** 

No information available.

#### 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 Not applicable 14.5 Environmental hazards

14.6 Special Precautions for Users

**Special Provisions** None

#### **IMDG**

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 Not regulated 14.4 Packing group 14.5 Environmental hazards Not applicable

14.6 Special Precautions for Users

**Special Provisions** None

14.7 Maritime transport in bulk

No information available

according to IMO instruments

#### RID

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

14.6 Special Precautions for Users

**Special Provisions** None

### ADR

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 Users

**Special Provisions** None

### **SECTION 15: Regulatory information**

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

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### National regulations

#### **France**

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Ethyl alcohol	RG 84	-
64-17-5		
Sodium chloride	RG 78	-
7647-14-5		

### **Netherlands**

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Ethyl alcohol	Present	-	Fertility Category 1A
			Development Category 1A
			Can be harmful via
			breastfeeding

### **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	75.	-
2-methyl-3(2H)-isothiazolone - 55965-84-9		
Hydrochloric acid - 7647-01-0	75.	-

### **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)

Biodidai i roddoto Rogaldtion (20) No 020/2012 (Bi R)	
Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Ethyl alcohol - 64-17-5	Product-type 1: Human hygiene Product-type 2:
	Disinfectants and algaecides not intended for direct
	application to humans or animals Product-type 4: Food and
	feed area
Sodium chloride - 7647-14-5	Product-type 1: Human hygiene
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

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	preservatives
Hydrochloric acid - 7647-01-0	Product-type 2: Disinfectants and algaecides not intended
	for direct application to humans or animals

<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

H225 - Highly flammable liquid and vapour

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

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H335 - May cause respiratory irritation

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 \* 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

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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)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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 22-Jan-2024 Revision Number 1.1

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

1.1. Product identifier

Product Name R7 - Diluent (80ml)

Catalogue Number(s) 7250G

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 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 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** 

Bio-Rad Laboratories Ltd

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.

34 Bolton Road

Parkwood, Johannesburg 2193

South Africa

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

### **SECTION 2: Hazards identification**

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### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitisation	Category 1A - (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).

## **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	No data available	200-289-5	No data available	-	-	-
Sodium chloride 7647-14-5	1 - 2.5	No data available	231-598-3	No data available	-	-	-
Hydrochloric acid 7647-01-0	0.01 - 0.099	No data available	(017-002-00 -2) 231-595-7	Eye Irrit. 2 (H319)	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	0.001 - 0.01	No data available	(613-167-00 -5)	\ ,	Eye Irrit. 2 :: 0.06%<=C<0.6 %	100	100

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2-methyl-3(2H)-isoth	Skin Corr. 1B (H314) Skin Corr. 1C ::
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	Dermal 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	Inhalation LC50 Rat >2.75 mg/L 4 h (condensation aerosol, Source: ECHA)	>2.75	Inhalation LC50 Rat >2.75 mg/L 4 h (condensation aerosol, Source:
Sodium chloride 7647-14-5	3000	10000	2.75 Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: ECHA API)	>42	ECHA) Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: ECHA API)
Hydrochloric acid 7647-01-0	238	5010	Inhalation LC50 Rat 1.68 mg/L 1 h (mist, Source: JAPAN_GHS)	1.68	Inhalation LC50 Rat 1.68 mg/L 1 h (mist, Source: JAPAN_GHS) 563.3022
5-Chloro-2-methyl-3(2H)-i sothiazolone, mixture with 2-methyl-3(2H)-isothiazol one 55965-84-9	1	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

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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

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

surrounding environment.

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

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

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 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 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

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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

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 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	European Union	Austria	Belgium	Bulgaria	Croatia
1,2,3-Propanetriol	-	-	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
56-81-5			-		-
Hydrochloric acid	TWA: 5 ppm	TWA: 5 ppm	TWA: 5 ppm	STEL: 10 ppm	TWA: 5 ppm
7647-01-0	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	STEL: 15.0 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>
	STEL: 10 ppm	STEL 10 ppm	STEL: 10 ppm	TWA: 5 ppm	STEL: 10 ppm
	STEL: 15 mg/m <sup>3</sup>	STEL 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	TWA: 8.0 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
5-Chloro-2-methyl-3(2H)-i		TWA: 0.05 mg/m <sup>3</sup>	-	-	-
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 <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>	TWA: 20 mg/m <sup>3</sup>
56-81-5		Ceiling: 15 mg/m <sup>3</sup>			
Hydrochloric acid	STEL: 10 ppm	TWA: 8 mg/m <sup>3</sup>	STEL: 5 ppm	TWA: 5 ppm	STEL: 5 ppm
7647-01-0	STEL: 15 mg/m <sup>3</sup>	Ceiling: 15 mg/m <sup>3</sup>	STEL: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	STEL: 7.6 mg/m <sup>3</sup>
	TWA: 5 ppm			STEL: 10 ppm	
	TWA: 8 mg/m <sup>3</sup>			STEL: 15 mg/m <sup>3</sup>	
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
1,2,3-Propanetriol	TWA: 10 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 200 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-
56-81-5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 2 0 0 mg/m	Peak: 400 mg/m <sup>3</sup>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Hydrochloric acid	STEL: 5 ppm	TWA: 2 ppm	TWA: 2 ppm	TWA: 5 ppm	TWA: 8 mg/m <sup>3</sup>
7647-01-0	STEL: 7.6 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3.0 mg/m <sup>3</sup>	TWA: 7 mg/m <sup>3</sup>	STEL: 16 mg/m <sup>3</sup>
	· ·		Peak: 4 ppm	STEL: 5 ppm	
			Peak: 6 mg/m <sup>3</sup>	STEL: 7 mg/m <sup>3</sup>	
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Sodium chloride	-	<u>-</u>	-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
7647-14-5				J	
Hydrochloric acid	TWA: 8 mg/m <sup>3</sup>	TWA: 5 ppm	Ceiling: 2 ppm	TWA: 5 ppm	TWA: 5 ppm
7647-01-0	TWA: 5 ppm	TWA: 8 mg/m <sup>3</sup>	Ceiling: 2.9 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>
	STEL: 10 ppm	STEL: 10 ppm		STEL: 10 ppm	STEL: 10 ppm
	STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>		STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
1,2,3-Propanetriol	-	-	-	-	TWA: 10 mg/m <sup>3</sup>
56-81-5					
Hydrochloric acid	STEL: 10 ppm	STEL: 10 ppm	TWA: 8 mg/m <sup>3</sup>	Ceiling: 5 ppm	STEL: 10 mg/m <sup>3</sup>
7647-01-0	STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>	Ceiling: 7 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
	TWA: 5 ppm	TWA: 5 ppm			-
	TWA: 8 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup>			

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Chemical name	P	Portugal	Romania	Slovakia	Slo	venia	Spain
1,2,3-Propanetriol 56-81-5	TWA	a: 10 mg/m <sup>3</sup>	-	TWA: 11 mg/m <sup>3</sup>		100 mg/m <sup>3</sup> 100 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Hydrochloric acid 7647-01-0	TWA STE STEL	/A: 5 ppm A: 8 mg/m³ EL: 10 ppm .: 15 mg/m³ ing: 2 ppm	TWA: 5 ppm TWA: 8 mg/m³ STEL: 10 ppm STEL: 15 mg/m³	TWA: 5 ppm TWA: 8.0 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup>	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		Sv	veden	Switzerland		Uni	ted Kingdom
1,2,3-Propanetriol 56-81-5			-	TWA: 50 mg/m STEL: 100 mg/r			/A: 10 mg/m³ EL: 30 mg/m³
Hydrochloric acid 7647-01-0		NGV: Bindande	/: 2 ppm 3 mg/m <sup>3</sup> : KGV: 4 ppm KGV: 6 mg/m <sup>3</sup>	TWA: 2 ppm TWA: 3 mg/m <sup>3</sup> STEL: 4 ppm STEL: 6 mg/m <sup>3</sup>		TV S	WA: 1 ppm VA: 2 mg/m³ TEL: 5 ppm EL: 8 mg/m³
5-Chloro-2-methyl-3(2H)-i zolone, mixture with 2-methyl-3(2H)-isothiazo 55965-84-9	1		-	S+ TWA: 0.2 mg/m STEL: 0.4 mg/n			-

### 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.

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 stateLiquidAppearanceLiquidColourredOdourOdourless.

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 known

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None known

None known

None known None known

None known

None known

None known

Flammability Limit in Air

Upper flammability or explosive

limits

Lower flammability or explosive No data available

limits

Flash point No data available 392.78 °C

**Autoignition temperature** 

**Decomposition temperature** 7.7

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

No data available

No data available Kinematic viscosity Dynamic viscosity No data available Water solubility Immiscible in water

Solubility(ies) No data available None known **Partition coefficient** No data available 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 No data available

Relative vapour density

**Particle characteristics** 

No information available **Particle Size 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

No information available. Reactivity

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

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**

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### 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

# The following values are calculated based on chapter 3.1 of the GHS document 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
Sodium chloride	= 3 g/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
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 an allergic skin reaction.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

Reproductive toxicity No information available.

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

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**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 This product does not contain any known or suspected endocrine disruptors.

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.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

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

Mobility in soil No information available.

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### PBT and vPvB assessment

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

#### 12.6. Endocrine disrupting properties

12.5. Results of PBT and vPvB assessment

**Endocrine disrupting properties** No information available.

#### 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 Users

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 Users

Special Provisions None

**14.7 Maritime transport in bulk** No information available

according to IMO instruments

<u>RID</u>

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

14.6 Special Precautions for Users

Special Provisions None

ADR

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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 applicable

14.6 Special Precautions for Users

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 7647-14-5	RG 78	-

### **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
Hydrochloric acid - 7647-01-0	75.	-
5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with	75.	-
2-methyl-3(2H)-isothiazolone - 55965-84-9		

### **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

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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

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

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H335 - May cause respiratory irritation

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 \* 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)

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European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

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

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

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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)

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 22-Jan-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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