KIT SAFETY DATA SHEET



Platelia Rubella IgM (96 tests) **Kit Product Name**

72851 Kit Catalogue Number(s)

Revision date 01-Mar-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 |
| 247A R1 - Microplate | |
| 7247B | R3 - Negative Control (0.75 ml) |
| 7247C | R4 - Calibrator (0.75ml) |
| 7247D | R5 - Positive Control (0.75ml) |
| 7247E | R6a - Antigen |
| 247F R6b - Conjugate (101x) (0.4ml) | |
| 7247G | 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

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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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 upTake up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling 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
(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protectionNo 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 temperatureNo data availableNone known

pH No data available None known

pH (as aqueous solution)No data availableNo information availableKinematic viscosityNo data availableNone 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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No data available Vapour pressure 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

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

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

None known

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge

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/irritationNo information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated 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

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

Unknown aquatic toxicityContains 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

<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
 Not regulated Not regulated 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
 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 Non

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

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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

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

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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 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 | Not 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

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

and shoes. Get immediate medical attention.

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

person. Get immediate medical attention.

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

protect themselves and prevent spread of contamination. 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 upTake up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

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

reuse.

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

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

7.2. Conditions for safe storage, including any incompatibilities

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

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 | European l | Jnion | Austria | Belgium | Bu | lgaria | Croatia |
|---------------|-------------|-------|------------------------------|-----------------------------|----------------|------------------------|-----------------------------|
| Sulfuric acid | TWA: 0.05 r | mg/m³ | TWA: 0.1 mg/m ³ | TWA: 0.2 mg/m ³ | TWA: 0 | .05 mg/m ³ | TWA: 0.05 mg/m ³ |
| 7664-93-9 | | | STEL 0.2 mg/m ³ | | | | |
| Chemical name | Cyprus | 3 | Czech Republic | Denmark | Es | tonia | Finland |
| Sulfuric acid | TWA: 0.05 r | mg/m³ | TWA: 1 mg/m ³ | TWA: 0.05 mg/m ³ | TWA: 0 | .05 mg/m ³ | TWA: 0.05 mg/m ³ |
| 7664-93-9 | | | TWA: 0.05 mg/m ³ | STEL: 0.1 mg/m ³ | | | STEL: 0.1 mg/m ³ |
| | | | Ceiling: 2 mg/m ³ | thoracic fraction | | | |
| Chemical name | France |) | Germany TRGS | Germany DFG | Gr | eece | Hungary |
| Sulfuric acid | TWA: 0.05 r | mg/m³ | TWA: 0.1 mg/m ³ | TWA: 0.1 mg/m ³ | TWA: 0 | .05 mg/m³ | TWA: 0.05 mg/m ³ |
| 7664-93-9 | | | | Peak: 0.1 mg/m ³ | | | |
| Chemical name | Ireland | k | Italy MDLPS | Italy AIDII | La | atvia | Lithuania |
| Sulfuric acid | TWA: 0.05 | ppm | TWA: 0.05 mg/m ³ | TWA: 0.2 mg/m ³ | TWA: 0 | .05 mg/m ³ | TWA: 0.05 mg/m ³ |
| 7664-93-9 | STEL: 0.15 | ppm | | | | | STEL: 3 mg/m ³ |
| Chemical name | Luxembo | urg | Malta | Netherlands | No | rway | Poland |
| Sulfuric acid | TWA: 0.05 r | mg/m³ | TWA: 0.05 mg/m ³ | TWA: 0.05 mg/m ³ | TWA: (|).1 mg/m ³ | TWA: 0.05 mg/m ³ |
| 7664-93-9 | | | | | STEL: | 0.3 mg/m ³ | |
| Chemical name | Portuga | al | Romania | Slovakia | Slo | venia | Spain |
| Sulfuric acid | TWA: 0.2 m | ng/m³ | TWA: 0.05 mg/m ³ | TWA: 0.05 mg/m ³ | TWA: 0 | .05 mg/m ³ | TWA: 0.05 mg/m ³ |
| 7664-93-9 | | | | | STEL: 0 | 0.05 mg/m ³ | |
| Chemical name | | Sı | weden | Switzerland | | Uni | ted Kingdom |
| Sulfuric acid | | | 0.1 mg/m ³ | TWA: 0.1 mg/m ³ | | TWA | A: 0.05 mg/m ³ |
| 7664-93-9 | | | KGV: 0.2 mg/m ³ | STEL: 0.2 mg/n | 1 ³ | STE | L: 0.15 mg/m ³ |

Biological occupational exposure limits

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

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

No information available.

8.2. Exposure controls

Personal protective equipment

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

Hand protection Wear suitable gloves. Impervious gloves.

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

Respiratory protectionNo protective equipment is needed under normal use conditions. If exposure limits are

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

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

not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be

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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 pointNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

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

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

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

ATA

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)

| Г | Chemical name | Restricted substance per REACH | Substance subject to authorisation per |
|---|---------------------------|--------------------------------|--|
| | | Annex XVII | REACH Annex XIV |
| Ī | 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 / 118 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] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|--|------------|---------------------------|---------------------------------|---|---|----------|-------------------------|
| Sodium chloride 7647-14-5 | 20 - 35 | Not available | 231-598-3 | Not classified | - | - | - |
| Hydrochloric acid 7647-01-0 | 0.3 - 0.99 | Not 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 | Not available | (613-167-00 -5) | Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) | Eye Irrit. 2 :: 0.06%<=C<0.6 % Skin Corr. 1C :: C>=0.6% Skin Irrit. 2 :: 0.06%<=C<0.6 % Skin Sens. 1A :: C>=0.0015% Eye Dam. 1 :: 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 | 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 |
| Sodium chloride | 3000 | 10000 | Inhalation LC50 Rat | >42 | Inhalation LC50 Rat |
| 7647-14-5 | | | >42 mg/L 1 h (no | | >42 mg/L 1 h (no |
| | | | deaths occurred, | | deaths occurred, |
| | | | aerosol, Source: | | aerosol, Source: |

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Revision date 22-Jan-2024

| 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

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

surrounding environment.

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

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

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the No info

chemical

No information available.

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 ³ | TWA: 8 mg/m ³ | TWA: 8 mg/m ³ | STEL: 15.0 mg/m ³ | TWA: 8 mg/m ³ |
| | STEL: 10 ppm | STEL 10 ppm | STEL: 10 ppm | TWA: 5 ppm | STEL: 10 ppm |
| | STEL: 15 mg/m ³ | STEL 15 mg/m ³ | STEL: 15 mg/m ³ | TWA: 8.0 mg/m ³ | STEL: 15 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-i | - | TWA: 0.05 mg/m ³ | - | - | - |
| 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 | | EL: 10 ppm | TWA: 8 mg/m ³ | STEL: 5 ppm | | : 5 ppm | STEL: 5 ppm |
| 7647-01-0 | | L: 15 mg/m ³ | Ceiling: 15 mg/m ³ | STEL: 8 mg/m ³ | | 8 mg/m ³ | STEL: 7.6 mg/m ³ |
| | | VA: 5 ppm | | | | : 10 ppm | |
| Chemical name | | A: 8 mg/m ³ France | Germany TRGS | Germany DFG | | 15 mg/m ³ eece | Hungary |
| Hydrochloric acid | | EL: 5 ppm | TWA: 2 ppm | TWA: 2 ppm | - | : 5 ppm | TWA: 8 mg/m ³ |
| 7647-01-0 | | L: 7.6 mg/m ³ | TWA: 2 ppin TWA: 3 mg/m ³ | TWA: 3.0 mg/m ³ | | 7 mg/m ³ | STEL: 16 mg/m ³ |
| 7047-01-0 | OIL | L. 7.0 mg/m | TWA. 5 mg/m | Peak: 4 ppm | | .: 5 ppm | OTEL. TO MIG/III |
| | | | | Peak: 6 mg/m ³ | | 7 mg/m ³ | |
| Chemical name | | Ireland | Italy MDLPS | Italy AIDII | | atvia | Lithuania |
| Sodium chloride | | - | <u> </u> | <u> </u> | TWA: | 5 mg/m ³ | TWA: 5 mg/m ³ |
| 7647-14-5 | | | | | | | ŭ |
| Hydrochloric acid | TW | A: 8 mg/m ³ | TWA: 5 ppm | Ceiling: 2 ppm | | : 5 ppm | TWA: 5 ppm |
| 7647-01-0 | | VA: 5 ppm | TWA: 8 mg/m ³ | Ceiling: 2.9 mg/m ³ | | 8 mg/m ³ | TWA: 8 mg/m ³ |
| | | EL: 10 ppm | STEL: 10 ppm | | | : 10 ppm | STEL: 10 ppm |
| | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | | | 15 mg/m ³ | STEL: 15 mg/m ³ |
| Chemical name | | xembourg | Malta | Netherlands | | orway | Poland |
| Hydrochloric acid | | EL: 10 ppm | STEL: 10 ppm | TWA: 8 mg/m ³ | | g: 5 ppm | STEL: 10 mg/m ³ |
| 7647-01-0 | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | STEL: 15 mg/m ³ | Ceiling | : 7 mg/m ³ | TWA: 5 mg/m ³ |
| | | VA: 5 ppm | TWA: 5 ppm | | | | |
| Chamical name | | A: 8 mg/m ³ | TWA: 8 mg/m³ Romania | Slovakia | Cla | venia | Cnoin |
| Chemical name | | Portugal | 1 17 17 | | | | Spain |
| Hydrochloric acid 7647-01-0 | | VA: 5 ppm A: 8 mg/m³ | TWA: 5 ppm TWA: 8 mg/m³ | TWA: 5 ppm TWA: 8.0 mg/m ³ | | : 5 ppm 8 mg/m³ | TWA: 5 ppm TWA: 7.6 mg/m ³ |
| 7047-01-0 | | EL: 10 ppm | STEL: 10 ppm | Ceiling: 15 mg/m ³ | | : 10 ppm | STEL: 10 ppm |
| | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | Coming. To mg/m | | 15 mg/m ³ | STEL: 15 mg/m ³ |
| | | ling: 2 ppm | 0122. 10 mg/m | | 0.22. | 10 mg/m | 0122. 10 mg/m |
| Chemical name | | Sı | weden | Switzerland | | Uni | ted Kingdom |
| Hydrochloric acid | | NG\ | /: 2 ppm | TWA: 2 ppm | | T | WA: 1 ppm |
| 7647-01-0 | | NGV: | 3 mg/m ³ | TWA: 3 mg/m ³ | ; | TV | VA: 2 mg/m ³ |
| | | | KGV: 4 ppm | STEL: 4 ppm | | | TEL: 5 ppm |
| | | Bindande | KGV: 6 mg/m ³ | STEL: 6 mg/m ² | 3 | ST | EL: 8 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-isothia | | - | S+ | 2 | | - | |
| zolone, mixture with | | | | TWA: 0.2 mg/m | | | |
| 2-methyl-3(2H)-isothiazo | ione | | | STEL: 0.4 mg/m | าง | | |
| 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 protectionNo special protective equipment required.

Respiratory protectionNo protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

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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

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 pointNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

Decomposition temperature

pH 7.4

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

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Water solubility Miscible in water

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

Bulk density
No data available
Liquid Density
No data available

Relative vapour density No data available None known

Particle characteristics

Particle Size No information available
Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

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 materialsNone known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

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

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

Skin contact 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/irritationNo 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 exposureNo 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 toxicityContains 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

14.1 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

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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 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

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 |
| | Product-type 2: Disinfectants and algaecides not intended |
| | for direct application to humans or animals Product-type 4: Food and feed area Product-type 6: Preservatives for products during storage Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimicides Product-type 13: Working or cutting fluid preservatives |

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

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H331 - Toxic if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

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 26-Apr-2023 Revision Number 1

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

1.1. Product identifier

Product Name R1 - Microplate

Catalogue Number(s) 7247A

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

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 mediaDo not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

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

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling 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.

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

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

None known

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

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid **Appearance** solid 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 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

Lower flammability or explosive No data available

limits

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

No data available Ηq None known

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

Dynamic viscosity No data available Insoluble in water Water solubility

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

No data available **Bulk density**

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Liquid DensityNo data availableRelative vapour densityNo data availableNone 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 avoidNone known based on information supplied.

10.5. Incompatible materials

Incompatible materialsNone known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

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

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

Skin contact 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.

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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/irritationNo information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties 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 toxicityContains 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 | 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

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

RID

| 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 26-Apr-2023

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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SAFETY DATA SHEET

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

Revision date 16-May-2023 Revision Number 1

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

1.1. Product identifier

Product Name R3 - Negative Control (0.75 ml)

Catalogue Number(s) 7247B

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 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) | | |
| Sodium chloride | 0.3 - 0.99 | Not available | 231-598-3 | Not classified | - | - | - |
| 7647-14-5 | | | | | | | |
| 5-Chloro-2-methyl-3 | 0.001 - | Not available | (613-167-00 | Acute Tox. 3 (H301) | Eye Irrit. 2 :: | 100 | 100 |
| (2H)-isothiazolone, | 0.01 | | -5) | Acute Tox. 3 (H311) | 0.06%<=C<0.6 | | |
| mixture with | | | | Acute Tox. 3 (H331) | % | | |
| 2-methyl-3(2H)-isoth | | | | Skin Corr. 1B (H314) | Skin Corr. 1C :: | | |
| 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% | | |

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

Acute Toxicity Estimate

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

| 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 |
| Sodium chloride | 3000 | 10000 | Inhalation LC50 Rat | >42 | Inhalation LC50 Rat |
| 7647-14-5 | | | >42 mg/L 1 h (no | | >42 mg/L 1 h (no |
| | | | deaths occurred, | | deaths occurred, |
| | | | aerosol, Source: | | aerosol, Source: |
| | | | ECHA_API) | | ECHA_API) |
| 5-Chloro-2-methyl-3(2H)-i | 53 | 87.12 | No data available | No data available | No data available |
| sothiazolone, mixture with | | | | | |
| 2-methyl-3(2H)-isothiazol | | | | | |
| one | | | | | |
| 55965-84-9 | | | | | |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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

Inhalation Remove to fresh air.

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

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

Itching. Rashes. Hives. **Symptoms**

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

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

source material and / or potentially infectious components.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

surrounding environment.

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

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Specific hazards arising from the

chemical

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

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

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

from and upwind of spill/leak.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning 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

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Exposure Limits

| Chemical name | Euro | pean Union | Austria | Belgium | Bu | Igaria | Croatia |
|---------------------------------|------|------------|-----------------------------|----------------|----------------|---------------------|--------------------------|
| 5-Chloro-2-methyl-3(2H)-i | i - | | TWA: 0.05 mg/m ³ | - | | - | - |
| sothiazolone, mixture with | ا ا | | Sh+ | | | | |
| 2-methyl-3(2H)-isothiazol | | | | | | | |
| one | | | | | | | |
| 55965-84-9 | | | | | | | |
| Chemical name | | Ireland | Italy MDLPS | Italy AIDII | La | atvia | Lithuania |
| Sodium chloride | - | | - | - | TWA: | 5 mg/m ³ | TWA: 5 mg/m ³ |
| 7647-14-5 | | | | | | | |
| Chemical name | | Sv | weden | Switzerland | | Uni | ted Kingdom |
| 5-Chloro-2-methyl-3(2H)-isothia | | | - | S+ | | | - |
| zolone, mixture with | | | | TWA: 0.2 mg/m | 13 | | |
| 2-methyl-3(2H)-isothiazolone | | | | STEL: 0.4 mg/m | 1 ³ | | |
| 55965-84-9 | | | | | | | |

Biological occupational exposure limits

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

Derived No Effect Level (DNEL) Predicted No Effect Concentration

No information available. No information available.

(PNEC)

8.2. Exposure controls

Personal protective equipment

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

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

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.

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

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Liquid Physical state **Appearance** Liquid Colour yellow Odour Odourless.

No information available **Odour threshold**

Remarks • Method **Property** Values

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

Upper flammability or explosive No data available

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R3 - Negative Control (0.75 ml)

Revision date 16-May-2023

None known

None known

None known

None known

None known

None known

limits

No data available Lower flammability or explosive

limits

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

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

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

Solubility(ies) No data available **Partition coefficient** No data available Vapour pressure No data available Relative density No data available

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

Relative vapour density **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

Stable under normal conditions. Stability

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

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Information on likely routes of exposure

Product Information

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

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

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

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

susceptible persons. (based on components).

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

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

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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 toxicityContains 8.24 % of components with unknown hazards to the aquatic environment.

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

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

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

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

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

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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 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

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 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 regulated
Not applicable

14.6 Special Precautions for Users

Special Provisions None

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

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

European Union

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

Authorisations and/or restrictions on use:

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

| The product comains one of more capetance (c) cap | jeet te reememen (rtegalamen (20) rte. | 100172000 (11271011); 71111000 7111) | |
|---|--|--------------------------------------|--|
| Chemical name | Restricted substance per REACH | Substance subject to authorisation p | |
| | 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

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

| 20 1 14111 1 1010011011 1 1044010 (110112000120) | |
|--|---|
| 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 |
| 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

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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)

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 16-May-2023

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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SAFETY DATA SHEET

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

Revision date 16-May-2023 Revision Number 1

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

1.1. Product identifier

Product Name R4 - Calibrator (0.75ml)

Catalogue Number(s) 7247C

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



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 human source material and / or potentially infectious components

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | Weight-% | REACH registration number | , , , , | | concentration | M-Factor | M-Factor (long-term) |
|------------------------------|------------|---------------------------|-------------|----------------------|------------------|----------|----------------------|
| | | | | 1272/2008 [CLP] | limit (SCL) | | |
| Sodium chloride 7647-14-5 | 0.3 - 0.99 | Not available | 231-598-3 | Not classified | - | - | - |
| Hydrochloric acid | 0.001 - | Not available | (017-002-00 | Skin Corr. 1B (H314) | Eye Irrit. 2 :: | - | - |
| 7647-01-0 | 0.01 | | -2) | Eye Irrit. 2 (H319) | 1%<=C<3% | | |
| | | | 231-595-7 | STOT SE 3 (H335) | Skin Corr. 1B :: | | |
| | | | | , , | C>=5% | | |
| | | | | | Skin Irrit. 2 :: | | |
| | | | | | 1%<=C<5% | | |
| | | | | | STOT SE 3 :: | | |
| | | | | | C>=10% | | |
| 5-Chloro-2-methyl-3 | 0.001 - | Not available | (613-167-00 | Acute Tox. 3 (H301) | Eye Irrit. 2 :: | 100 | 100 |
| (2H)-isothiazolone, | 0.01 | | -5) | Acute Tox. 3 (H311) | 0.06%<=C<0.6 | | |
| mixture with | | | | Acute Tox. 3 (H331) | % | | |
| 2-methyl-3(2H)-isoth | | | | Skin Corr. 1B (H314) | Skin Corr. 1C:: | | |
| iazolone | | | | Eye Dam. 1 (H318) | C>=0.6% | | |

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R4 - Calibrator (0.75ml)

Revision date 16-May-2023

| | | | . | |
|------------|--|------------------------|------------------|--|
| 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 |
|---|-----------------|----------------------|--|---|--|
| 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) |
| 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

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.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

surrounding environment.

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

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

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

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

5.3. Advice for firefighters

Special protective equipment and

precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

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

from and upwind of spill/leak.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

Methods for cleaning 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

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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 | | pean Union | Austria | Belgium | | lgaria | Croatia |
|------------------------------|--------------------------|--------------------------|-------------------------------|--------------------------------|--------------------------|-----------------------|-----------------------------|
| Hydrochloric acid | | VA: 5 ppm | TWA: 5 ppm | TWA: 5 ppm | STEL | : 10 ppm | TWA: 5 ppm |
| 7647-01-0 | TWA: 8 mg/m ³ | | TWA: 8 mg/m ³ | TWA: 8 mg/m ³ | | 5.0 mg/m ³ | TWA: 8 mg/m ³ |
| | | EL: 10 ppm | STEL 10 ppm | STEL: 10 ppm | | : 5 ppm | STEL: 10 ppm |
| | STE | L: 15 mg/m ³ | STEL 15 mg/m ³ | STEL: 15 mg/m ³ | TWA: 8 | 3.0 mg/m ³ | STEL: 15 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-i | | - | TWA: 0.05 mg/m ³ | - | | - | - |
| sothiazolone, mixture with | | | Sh+ | | | | |
| 2-methyl-3(2H)-isothiazol | | | | | | | |
| one | | | | | | | |
| 55965-84-9 | | | | | _ | | |
| Chemical name | | Cyprus | Czech Republic | Denmark | | tonia | Finland |
| Hydrochloric acid | | EL: 10 ppm | TWA: 8 mg/m ³ | STEL: 5 ppm | | : 5 ppm | STEL: 5 ppm |
| 7647-01-0 | | L: 15 mg/m ³ | Ceiling: 15 mg/m ³ | STEL: 8 mg/m ³ | | 8 mg/m ³ | STEL: 7.6 mg/m ³ |
| | | VA: 5 ppm | | | | : 10 ppm | |
| | I VV | A: 8 mg/m ³ | O TD00 | 0 050 | | 15 mg/m ³ | |
| Chemical name | | France | Germany TRGS | Germany DFG | | eece | Hungary |
| Hydrochloric acid | | EL: 5 ppm | TWA: 2 ppm | TWA: 2 ppm | | : 5 ppm | TWA: 8 mg/m ³ |
| 7647-01-0 | SIE | L: 7.6 mg/m ³ | TWA: 3 mg/m ³ | TWA: 3.0 mg/m ³ | | 7 mg/m ³ | STEL: 16 mg/m ³ |
| | | | | Peak: 4 ppm | | .: 5 ppm | |
| Chaminal mans | | المماميما | Italy MDI DC | Peak: 6 mg/m ³ | | 7 mg/m³ | l ithunania |
| Chemical name | | Ireland | Italy MDLPS | Italy AIDII | | atvia | Lithuania |
| Sodium chloride 7647-14-5 | | - | - | - | I WA: | 5 mg/m ³ | TWA: 5 mg/m ³ |
| Hydrochloric acid | TWA: 8 mg/m ³ | | TWA: 5 ppm | Ceiling: 2 ppm | TW/A | : 5 ppm | TWA: 5 ppm |
| 7647-01-0 | | VA: 5 ppm | TWA: 8 mg/m ³ | Ceiling: 2.9 mg/m ³ | TWA: 8 mg/m ³ | | TWA: 8 mg/m ³ |
| | | EL: 10 ppm | STEL: 10 ppm | ••g. <u>=</u> g | | : 10 ppm | STEL: 10 ppm |
| | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | | | 15 mg/m ³ | STEL: 15 mg/m ³ |
| Chemical name | | xembourg | Malta | Netherlands | | rway | Poland |
| Hydrochloric acid | STI | EL: 10 ppm | STEL: 10 ppm | TWA: 8 mg/m ³ | Ceiling: 5 ppm | | STEL: 10 mg/m ³ |
| 7647-01-0 | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | STEL: 15 mg/m ³ | | : 7 mg/m³ | TWA: 5 mg/m ³ |
| | | VA: 5 ppm | TWA: 5 ppm | | | Ü | |
| | TW | A: 8 mg/m ³ | TWA: 8 mg/m ³ | | | | |
| 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 | TW | A: 8 mg/m ³ | TWA: 8 mg/m ³ | TWA: 8.0 mg/m ³ | TWA: | 8 mg/m ³ | TWA: 7.6 mg/m ³ |
| | | EL: 10 ppm | STEL: 10 ppm | Ceiling: 15 mg/m ³ | | : 10 ppm | STEL: 10 ppm |
| | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | | STEL: | 15 mg/m ³ | STEL: 15 mg/m ³ |
| | Cei | ling: 2 ppm | | | | | |
| Chemical name | | | weden | Switzerland | | | ted Kingdom |
| Hydrochloric acid | | | /: 2 ppm | TWA: 2 ppm | | | WA: 1 ppm |
| 7647-01-0 | 7647-01-0 | | : 3 mg/m³ | TWA: 3 mg/m ³ | ; | | VA: 2 mg/m ³ |
| | | Bindande KGV: 4 ppm | | STEL: 4 ppm | | STEL: 5 ppm | |
| | | Bindande | KGV: 6 mg/m ³ | | | ST | EL: 8 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-i | | | - | S+ | | | - |
| zolone, mixture with | | | | TWA: 0.2 mg/m | | | |
| 2-methyl-3(2H)-isothiazo | lone | | | STEL: 0.4 mg/n | 1 ³ | | |

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| | | |
|------------|-------------|------|
| 55965-84-9 | | |

Biological occupational exposure limits

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

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

No information available. No information available.

(PNEC)

8.2. Exposure controls

Personal protective equipment

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

Hand protection Wear suitable gloves.

Skin and body protectionWear suitable protective clothing.

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

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

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical 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

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

pH No data available None known
No data available None 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

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

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None known

Relative vapour density

Particle characteristics **Particle Size**

Particle Size Distribution

No information available No information available

No data 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

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).

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

Symptoms related to the physical, chemical and toxicological characteristics

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Symptoms

Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

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.

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 |
|-----------------|----------------------|--|----------------------------|--|
| Sodium chloride | - | LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: =7050mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) | - | EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) |

12.2. Persistence and degradability

Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

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

12.4. Mobility in soil

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

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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 regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Precautions for Users

Special Provisions None

<u>IMDG</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

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

National regulations

France

Occupational Illnesses (R-463-3, France)

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

European Union

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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)

| 20 Tidik 110tottion 110ddots (1101/2000/20) | |
|---|---|
| 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 |
| 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

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

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H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

Revision Note Significant changes throughout SDS. Review all sections.

16-May-2023 **Revision date**

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

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

End of Safety Data Sheet

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SAFETY DATA SHEET

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

Revision date 16-May-2023 Revision Number 1

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

1.1. Product identifier

Product Name R5 - Positive Control (0.75ml)

Catalogue Number(s) 7247D

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



Hazard statements

Warning

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 human source material and / or potentially infectious components

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | Weight-% | REACH registration number | , | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|--|-----------------|---------------------------|---------------------------------|---|---|----------|-------------------------|
| Sodium chloride 7647-14-5 | 0.3 - 0.99 | Not available | 231-598-3 | Not classified | - | - | - |
| Hydrochloric acid 7647-01-0 | 0.001 - 0.01 | Not 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 | 0.01 | Not available | (613-167-00 -5) | Acute Tox. 3 (H311) Acute Tox. 3 (H331) | Eye Irrit. 2 :: 0.06%<=C<0.6 % Skin Corr. 1C :: C>=0.6% | | 100 |

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R5 - Positive Control (0.75ml)

| 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% |

Revision date 16-May-2023

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 | Inhalation LC50 - 4 |
|---|-----------------|----------------|---|-----------------------------|---|
| Sodium chloride 7647-14-5 | 3000 | mg/kg 10000 | Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: | hour - vapour - mg/L >42 | hour - gas - ppm Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: |
| Hydrochloric acid 7647-01-0 | 238 | 5010 | ECHA_API) Inhalation LC50 Rat 1.68 mg/L 1 h (mist, Source: JAPAN_GHS) | 1.68 | ECHA_API) 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

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.

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

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

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

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

contaminated clothing and wash it before reuse.

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

7.2. Conditions for safe storage, including any incompatibilities

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Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. 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 | | pean Union | Austria | Belgium | | lgaria | Croatia |
|------------------------------|---------------------------------|--------------------------|-------------------------------|--------------------------------|----------------|-----------------------|-----------------------------|
| Hydrochloric acid | | VA: 5 ppm | TWA: 5 ppm | TWA: 5 ppm | STEL | : 10 ppm | TWA: 5 ppm |
| 7647-01-0 | | A: 8 mg/m ³ | TWA: 8 mg/m ³ | TWA: 8 mg/m ³ | | 5.0 mg/m ³ | TWA: 8 mg/m ³ |
| | | EL: 10 ppm | STEL 10 ppm | STEL: 10 ppm | | : 5 ppm | STEL: 10 ppm |
| | STE | L: 15 mg/m ³ | STEL 15 mg/m ³ | STEL: 15 mg/m ³ | TWA: 8 | 3.0 mg/m ³ | STEL: 15 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-i | | - | TWA: 0.05 mg/m ³ | - | | - | - |
| sothiazolone, mixture with | | | Sh+ | | | | |
| 2-methyl-3(2H)-isothiazol | | | | | | | |
| one | | | | | | | |
| 55965-84-9 | | | | | | | |
| Chemical name | | Cyprus | Czech Republic | Denmark | | tonia | Finland |
| Hydrochloric acid | | EL: 10 ppm | TWA: 8 mg/m ³ | STEL: 5 ppm | | : 5 ppm | STEL: 5 ppm |
| 7647-01-0 | | L: 15 mg/m ³ | Ceiling: 15 mg/m ³ | STEL: 8 mg/m ³ | | 8 mg/m ³ | STEL: 7.6 mg/m ³ |
| | | VA: 5 ppm | | | | : 10 ppm | |
| | I VV | A: 8 mg/m ³ | O TD 00 | 0 050 | | 15 mg/m ³ | |
| Chemical name | | France | Germany TRGS | Germany DFG | | eece | Hungary |
| Hydrochloric acid | | EL: 5 ppm | TWA: 2 ppm | TWA: 2 ppm | | : 5 ppm | TWA: 8 mg/m ³ |
| 7647-01-0 | SIE | L: 7.6 mg/m ³ | TWA: 3 mg/m ³ | TWA: 3.0 mg/m ³ | | 7 mg/m ³ | STEL: 16 mg/m ³ |
| | | | | Peak: 4 ppm | | .: 5 ppm | |
| Chaminal mans | | المماميما | Italy MDI DC | Peak: 6 mg/m ³ | | 7 mg/m³ | l ithunania |
| Chemical name | | Ireland | Italy MDLPS | Italy AIDII | | atvia | Lithuania |
| Sodium chloride 7647-14-5 | | - | - | - | I WA: | 5 mg/m ³ | TWA: 5 mg/m ³ |
| Hydrochloric acid | Τ\// | A: 8 mg/m ³ | TWA: 5 ppm | Ceiling: 2 ppm | TW/A | : 5 ppm | TWA: 5 ppm |
| 7647-01-0 | | VA: 5 ppm | TWA: 8 mg/m ³ | Ceiling: 2.9 mg/m ³ | | 8 mg/m ³ | TWA: 8 mg/m ³ |
| | | EL: 10 ppm | STEL: 10 ppm | ••g. <u>=</u> g | | : 10 ppm | STEL: 10 ppm |
| | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | | | 15 mg/m ³ | STEL: 15 mg/m ³ |
| Chemical name | Luxemboura | | Malta | Netherlands | | rway | Poland |
| Hydrochloric acid | STI | EL: 10 ppm | STEL: 10 ppm | TWA: 8 mg/m ³ | Ceilin | g: 5 ppm | STEL: 10 mg/m ³ |
| 7647-01-0 | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | STEL: 15 mg/m ³ | | : 7 mg/m³ | TWA: 5 mg/m ³ |
| | | VA: 5 ppm | TWA: 5 ppm | | | J | |
| | TW | A: 8 mg/m ³ | TWA: 8 mg/m ³ | | | | |
| 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 | TW | A: 8 mg/m ³ | TWA: 8 mg/m ³ | TWA: 8.0 mg/m ³ | TWA: | 8 mg/m ³ | TWA: 7.6 mg/m ³ |
| | | EL: 10 ppm | STEL: 10 ppm | Ceiling: 15 mg/m ³ | | : 10 ppm | STEL: 10 ppm |
| | | L: 15 mg/m ³ | STEL: 15 mg/m ³ | | STEL: | 15 mg/m ³ | STEL: 15 mg/m ³ |
| | Cei | ling: 2 ppm | | | | | |
| Chemical name | Sv | | weden | Switzerland | | | ted Kingdom |
| Hydrochloric acid | | | /: 2 ppm | TWA: 2 ppm | | | WA: 1 ppm |
| 7647-01-0 | | | : 3 mg/m³ | TWA: 3 mg/m ³ | | | VA: 2 mg/m ³ |
| | | | KGV: 4 ppm | STEL: 4 ppm | | | TEL: 5 ppm |
| | | Bindande | KGV: 6 mg/m ³ | STEL: 6 mg/m ² | 3 | ST | EL: 8 mg/m ³ |
| | 5-Chloro-2-methyl-3(2H)-isothia | | - | S+ | | | - |
| zolone, mixture with | | | | TWA: 0.2 mg/m | | | |
| 2-methyl-3(2H)-isothiazolone | | | | STEL: 0.4 mg/n | 1 ³ | | |

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| 55965-84-9 | | |
|------------|--|--|

Biological occupational exposure limits

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

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

No information available. No information available.

(PNEC)

8.2. Exposure controls

Personal protective equipment

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

Hand protection Wear suitable gloves.

Skin and body protectionWear suitable protective clothing.

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

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

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquidAppearanceLiquidColouryellowOdourOdourless.

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 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

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 viscosityNo data availableNone knownDynamic viscosityNo data availableNone 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

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R5 - Positive Control (0.75ml)

Revision date 16-May-2023

Relative vapour density

Particle characteristics

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

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge

10.3. Possibility of hazardous reactions

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).

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

Symptoms related to the physical, chemical and toxicological characteristics

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R5 - Positive Control (0.75ml)

Revision date 16-May-2023

Symptoms

Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

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.

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 |
|-----------------|----------------------|--|----------------------------|--|
| Sodium chloride | - | LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: =7050mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss) | - | EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) |

12.2. Persistence and degradability

Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

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

12.4. Mobility in soil

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

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Waste from residues/unused

products enviro

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 regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot 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 according to IMO instruments

No information available

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

National regulations

France

Occupational Illnesses (R-463-3, France)

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

European Union

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

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

at work.

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 |
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with | Product-type 2: Disinfectants and algaecides not intended |
| | for direct application to humans or animals Product-type 4: Food and feed area Product-type 6: Preservatives for products during storage Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimicides Product-type 13: Working or cutting fluid preservatives |

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

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

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H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

Revision Note Significant changes throughout SDS. Review all sections.

16-May-2023 **Revision date**

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

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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 11-May-2023 Revision Number 1

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

1.1. Product identifier

Product Name R6a - Antigen

Catalogue Number(s) 7247E

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). (Cattle).

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) | | |
| Sucrose | 10 - 20 | Not available | 200-334-9 | Not classified | - | - | - |
| 57-50-1 | | | | | | | |
| 5-Chloro-2-methyl-3 | 0.01 - | Not available | (613-167-00 | Acute Tox. 3 (H301) | Eye Irrit. 2 :: | 100 | 100 |
| (2H)-isothiazolone, | 0.099 | | -5) | Acute Tox. 3 (H311) | 0.06%<=C<0.6 | | |
| mixture with | | | | Acute Tox. 3 (H331) | % | | |
| 2-methyl-3(2H)-isoth | | | | Skin Corr. 1B (H314) | Skin Corr. 1C :: | | |
| 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% | | |

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

Acute Toxicity Estimate

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

| Chemical name | Oral LD50 mg/kg | Dermal LD50 | Inhalation LC50 - 4 | Inhalation LC50 - 4 | Inhalation LC50 - 4 |
|----------------------------|-----------------|-------------------|-------------------------|----------------------|---------------------|
| | | mg/kg | hour - dust/mist - mg/L | hour - vapour - mg/L | hour - gas - ppm |
| Sucrose | 29700 | No data available | No data available | No data available | No data available |
| 57-50-1 | | | | | |
| 5-Chloro-2-methyl-3(2H)-i | 53 | 87.12 | No data available | No data available | No data available |
| sothiazolone, mixture with | | | | | |
| 2-methyl-3(2H)-isothiazol | | | | | |
| one | | | | | |
| 55965-84-9 | | | | | |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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

Inhalation Remove to fresh air.

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

chemical

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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

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

from and upwind of spill/leak.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

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

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

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

contaminated clothing and wash it before reuse.

General hygiene considerations 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

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| Chemical name | Euro | pean Union | Austria | Belgium | | Igaria | Croatia |
|------------------------------|----------------------------|-------------------------|-----------------------------|---------------------------|--------|-----------------------|----------------------------|
| Sucrose | | - | - | TWA: 10 mg/m ³ | TWA: 1 | 0.0 mg/m ³ | TWA: 10 mg/m ³ |
| 57-50-1 | | | | | | | STEL: 20 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-i | | | TWA: 0.05 mg/m ³ | - | | - | - |
| sothiazolone, mixture with | | | Sh+ | | | | |
| 2-methyl-3(2H)-isothiazol | | | | | | | |
| one | | | | | | | |
| 55965-84-9 | | | | | | | |
| Chemical name | | Cyprus | Czech Republic | Denmark | Es | stonia | Finland |
| Sucrose | | - | - | - | TWA: | 10 mg/m ³ | - |
| 57-50-1 | | | | | | | |
| Chemical name | France | | Germany TRGS | Germany DFG | Gı | reece | Hungary |
| Sucrose | TWA | A: 10 mg/m ³ | - | - | | - | - |
| 57-50-1 | | | | | | | |
| Chemical name | Ireland | | Italy MDLPS | Italy AIDII | L | atvia | Lithuania |
| Sucrose | TWA: 10 mg/m ³ | | - | TWA: 10 mg/m ³ | TWA: | 5 mg/m ³ | TWA: 10 mg/m ³ |
| 57-50-1 | STEL: 20 mg/m ³ | | | | | | |
| Chemical name | ı | Portugal | Romania | Slovakia | Slo | ovenia | Spain |
| Sucrose | TWA | A: 10 mg/m ³ | - | - | | - | TWA: 10 mg/m ³ |
| 57-50-1 | | _ | | | | | |
| Chemical name | | Sı | weden | Switzerland | | United Kingdom | |
| Sucrose | | | - | - | | TW | /A: 10 mg/m ³ |
| 57-50-1 | | | | | | STE | EL: 20 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-is | o-2-methyl-3(2H)-isothia | | - | S+ | | | - |
| zolone, mixture with | | | TWA: 0.2 mg/m | 13 | | | |
| 2-methyl-3(2H)-isothiazolone | | | | STEL: 0.4 mg/n | | | |
| 55965-84-9 | | | | ŭ | | | |

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 stateSolidAppearancesolid

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Colour White Odourless.

Odour threshold No information available

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

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

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

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

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

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone 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
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. 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

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Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

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

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

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

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

susceptible persons. (based on components).

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|---------------------|-----------------------|-----------------|
| Sucrose | = 29700 mg/kg (Rat) | - | - |
| | | | |
| 5-Chloro-2-methyl-3(2H)-isothia zolone, mixture with | = 53 mg/kg (Rat) | = 87.12 mg/kg(Rabbit) | - |
| 2-methyl-3(2H)-isothiazolone | | | |

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

Skin corrosion/irritationNo information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicityNo information available.

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STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties 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 toxicityContains 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.

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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 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

14.1UN 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

14.1UN 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

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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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 capetance(c) cap | jour to rectriction (regulation (20) ito: | 100172000 (11271011); 71111000 71111) | |
|---|---|--|--|
| 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

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

| <u> </u> | | |
|-------------------|---|--|
| Chemical name | EU - Plant Protection Products (1107/2009/EC) | |
| Sucrose - 57-50-1 | Plant protection agent | |

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

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

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

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

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

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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 11-May-2023

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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SAFETY DATA SHEET

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

Revision date 11-May-2023 Revision Number 1

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

1.1. Product identifier

Product Name R6b - Conjugate (101x) (0.4ml)

Catalogue Number(s) 7247F

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 Drive3 boulevard Raymond PoincaréHercules, CA 9454792430 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

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) |
|--|------------|---------------------------|---------------------------------|---|---|----------|----------------------|
| | | | , | 1272/2008 [CLP] | limit (SCL) | | (3 3 7 |
| 1,2,3-Propanetriol 56-81-5 | 20 - 35 | Not available | 200-289-5 | Not classified | - | - | - |
| Ethyl alcohol 64-17-5 | 0.3 - 0.99 | Not available | (603-002-00 -5) 200-578-6 | Flam. Liq. 2 (H225) | • | - | - |
| Sodium chloride 7647-14-5 | 0.3 - 0.99 | Not available | 231-598-3 | Not classified | - | - | - |
| 5-Chloro-2-methyl-3 (2H)-isothiazolone, mixture with 2-methyl-3(2H)-isoth iazolone 55965-84-9 | 0.01 | Not available | (613-167-00 -5) | Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) | Eye Irrit. 2 :: 0.06%<=C<0.6 % Skin Corr. 1C :: C>=0.6% Skin Irrit. 2 :: 0.06%<=C<0.6 % Skin Sens. 1A | | 100 |

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| | | (H410) | :: C>=0.0015% | |
|--|--|--------|---------------|--|
| | | | Eye Dam. 1 :: | |
| | | | C>=0.6% | |

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

Acute Toxicity Estimate

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

| Chemical name | Oral LD50 mg/kg | | Inhalation LC50 - 4 | Inhalation LC50 - 4 | Inhalation LC50 - 4 |
|----------------------------|-----------------|-------------------|-------------------------|----------------------|---------------------|
| | | mg/kg | hour - dust/mist - mg/L | hour - vapour - mg/L | hour - gas - ppm |
| 1,2,3-Propanetriol | 12600 | 10000 | Inhalation LC50 Rat | >2.75 | Inhalation LC50 Rat |
| 56-81-5 | | | >2.75 mg/L 4 h | | >2.75 mg/L 4 h |
| | | | (condensation aerosol, | | (condensation |
| | | | Source: ECHA) | | aerosol, Source: |
| | | | 2.75 | | ECHA) |
| Ethyl alcohol | 7060 | No data available | | 116.9 | Inhalation LC50 Rat |
| 64-17-5 | | | 116.9 mg/L 4 h (males, | 133.8 | 116.9 mg/L 4 h |
| | | | vapor, Source: | | (males, vapor, |
| | | | ECHA_API); Inhalation | | Source: ECHA_API); |
| | | | LC50 Rat 133.8 mg/L 4 | | Inhalation LC50 Rat |
| | | | h (females, vapor, | | 133.8 mg/L 4 h |
| | | | Source: ECHA_API) | | (females, vapor, |
| | | | 116.9 | | Source: ECHA_API) |
| | 2222 | 40000 | 133.8 | 40 | 1111111111111 |
| Sodium chloride | 3000 | 10000 | Inhalation LC50 Rat | >42 | Inhalation LC50 Rat |
| 7647-14-5 | | | >42 mg/L 1 h (no | | >42 mg/L 1 h (no |
| | | | deaths occurred, | | deaths occurred, |
| | | | aerosol, Source: | | aerosol, Source: |
| 5 Oblana O markhad 0/01 IV | 50 | 07.40 | ECHA_API) | Nie dete enellele | ECHA_API) |
| 5-Chloro-2-methyl-3(2H)-i | | 87.12 | No data available | No data available | No data available |
| sothiazolone, mixture with | | | | | |
| 2-methyl-3(2H)-isothiazol | | | | | |
| one 55965-84-9 | | | | | |
| 55965-84-9 | | | | | |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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

Inhalation Remove to fresh air.

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

Consult a doctor.

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

or allergic reactions see a doctor.

Ingestion Rinse mouth.

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

Symptoms Itching. Rashes. Hives.

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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.

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

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

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

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

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

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

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

from and upwind of spill/leak.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

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.

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

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

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

contaminated clothing and wash it before reuse.

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

7.2. Conditions for safe storage, including any incompatibilities

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

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 ³ | - | TWA: 10 mg/m ³ |
| 56-81-5 | | TWA: 1000 ppm | TWA: 1000 ppm | TWA: 1000 mg/m ³ | TWA: 1000 ppm |
| Ethyl alcohol 64-17-5 | - | TWA: 1000 ppm TWA: 1900 mg/m ³ | TWA: 1000 ppm TWA: 1907 mg/m ³ | TVVA: 1000 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ |
| 04-17-5 | | STEL 2000 ppm | TVVA. 1907 mg/m² | | TVVA. 1900 mg/m ² |
| | | STEL 2000 ppill STEL 3800 mg/m ³ | | | |
| 5-Chloro-2-methyl-3(2H)-i | | TWA: 0.05 mg/m ³ | | | |
| sothiazolone, mixture with | - | Sh+ | - | - | - |
| 2-methyl-3(2H)-isothiazol | | SIIT | | | |
| one | | | | | |
| 55965-84-9 | | | | | |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| 1,2,3-Propanetriol | - | TWA: 10 mg/m ³ | - | TWA: 10 mg/m ³ | TWA: 20 mg/m ³ |
| 56-81-5 | | Ceiling: 15 mg/m ³ | | | |
| Ethyl alcohol | - | TWA: 1000 mg/m ³ | TWA: 1000 ppm | TWA: 500 ppm | TWA: 1000 ppm |
| 64-17-5 | | Ceiling: 3000 mg/m ³ | TWA: 1900 mg/m ³ | TWA: 1000 mg/m ³ | TWA: 1900 mg/m ³ |
| | | | STEL: 2000 ppm | STEL: 1000 ppm | STEL: 1300 ppm |
| | | | STEL: 3800 mg/m ³ | STEL: 1900 mg/m ³ | STEL: 2500 mg/m ³ |
| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
| 1,2,3-Propanetriol | TWA: 10 mg/m ³ | TWA: 200 mg/m ³ | TWA: 200 mg/m ³ | TWA: 10 mg/m ³ | - |
| 56-81-5 | | | Peak: 400 mg/m ³ | | |
| Ethyl alcohol | TWA: 1000 ppm | TWA: 200 ppm | TWA: 200 ppm | TWA: 1000 ppm | TWA: 1900 mg/m ³ |
| 64-17-5 | TWA: 1900 mg/m ³ | TWA: 380 mg/m ³ | TWA: 380 mg/m ³ | TWA: 1900 mg/m ³ | STEL: 3800 mg/m ³ |
| | STEL: 5000 ppm | | Peak: 800 ppm | | |
| | STEL: 9500 mg/m ³ | | Peak: 1520 mg/m ³ | | |
| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
| Ethyl alcohol | STEL: 1000 ppm | - | STEL: 1000 ppm | TWA: 1000 mg/m ³ | TWA: 500 ppm |
| 64-17-5 | | | STEL: 1884 mg/m ³ | | TWA: 1000 mg/m ³ |
| | | | | | STEL: 1000 ppm |
| | | | | | STEL: 1900 mg/m ³ |
| Sodium chloride | - | - | - | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ |
| 7647-14-5 | | NA 11 | NI di li li | N.I. | D.I. I |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| 1,2,3-Propanetriol 56-81-5 | - | - | - | - | TWA: 10 mg/m ³ |
| Ethyl alcohol | - | - | TWA: 260 mg/m ³ | TWA: 500 ppm | TWA: 1900 mg/m ³ |
| 64-17-5 | | | STEL: 1900 mg/m ³ | TWA: 950 mg/m ³ | |
| | | | H* | STEL: 625 ppm | |
| | | | | STEL: 1187.5 mg/m ³ | |
| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
| 1,2,3-Propanetriol | TWA: 10 mg/m ³ | - | TWA: 11 mg/m ³ | TWA: 200 mg/m ³ | TWA: 10 mg/m ³ |

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| 56-81-5 | | | | | STEL: 4 | 400 mg/m ³ | |
|-----------------------------|-------|--------------|-----------------------------|---------------------------------|----------------|-----------------------|------------------------------|
| | STEL | _: 1000 ppm | TWA: 1000 ppm | | | 960 mg/m ³ | STEL: 1000 ppm |
| 64-17-5 | | | TWA: 1900 mg/m | | | 500 ppm | STEL: 1910 mg/m ³ |
| | | | STEL: 5000 ppm | Ceiling: 1920 mg/m ³ | | 1000 ppm | |
| | | | STEL: 9500 mg/m | 3 | STEL: 1 | 920 mg/m ³ | |
| Chemical name | | Sv | veden | Switzerland | | Uni | ted Kingdom |
| 1,2,3-Propanetriol | | | - | TWA: 50 mg/m | 3 | TW | /A: 10 mg/m ³ |
| 56-81-5 | | | | STEL: 100 mg/r | n ³ | STI | EL: 30 mg/m ³ |
| Ethyl alcohol | | NGV: | 500 ppm | TWA: 500 ppm | 1 | TW | 'A: 1000 ppm |
| 64-17-5 | | | 000 mg/m ³ | TWA: 960 mg/n | 1 ³ | TWA | \: 1920 mg/m ³ |
| | | | KGV: 1000 ppm | STEL: 1000 ppr | m | STE | EL: 3000 ppm |
| | | Vägledande k | (GV: 1900 mg/m ³ | STEL: 1920 mg/ | m³ | STE | L: 5760 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-iso | othia | | - | S+ | | | - |
| zolone, mixture with | | | | TWA: 0.2 mg/m | 1 ³ | | |
| 2-methyl-3(2H)-isothiazolo | one | | | STEL: 0.4 mg/n | 1 3 | | |
| 55965-84-9 | | | | | | | |

Biological occupational exposure limits

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

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

No information available.

8.2. Exposure controls

Personal protective equipment

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

Hand protection Wear suitable gloves.

Skin and body protectionWear suitable protective clothing.

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

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

General hygiene considerations 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 stateLiquidAppearanceLiquidColourvioletOdourOdourless.

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

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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
None known

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
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. Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoidNone known based on information supplied.

10.5. Incompatible materials

Incompatible materialsNone known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

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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

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) | - |

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 toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

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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 toxicityContains 3.9011 % 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, | - | - |
| Ethyl alcohol | - | Oncorhynchus mykiss) 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

| 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 |

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| 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 | |

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 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

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

RID

| 111 | |
|---------------------------------|---------------|
| 14.1 UN number | Not regulated |
| 14.2 UN proper shipping name | Not regulated |
| 14.3 Transport hazard class(es) | Not regulated |

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R6b - Conjugate (101x) (0.4ml)

Revision date 11-May-2023

14.4 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 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

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 |
|-----------------|------------------|-------|
| 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 Annex XVII | Substance subject to authorisation per REACH Annex XIV |
|---|---|--|
| 5-Chloro-2-methyl-3(2H)-isothiazolone, mixture with 2-methyl-3(2H)-isothiazolone - 55965-84-9 | | - |

Persistent Organic Pollutants

Not applicable

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

Not applicable

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

| LO - Hant Hotection Houdets (Horizous/LO) | |
|---|---|
| Chemical name | EU - Plant Protection Products (1107/2009/EC) |
| Sodium chloride - 7647-14-5 | Plant protection agent |

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

| 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 |
| | 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

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

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 |

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| 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 11-May-2023

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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SAFETY DATA SHEET

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

Revision date 11-May-2023 Revision Number 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) 7247G

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

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) |
|--|-----------------|---------------------------|---------------------------------|---|---|----------|----------------------|
| | | namber | macx rvo) | 1272/2008 [CLP] | limit (SCL) | | (long-tollin) |
| Sodium chloride 7647-14-5 | 1 - 2.5 | Not available | 231-598-3 | Not classified | - | - | - |
| Hydrochloric acid 7647-01-0 | 0.01 - 0.099 | Not available | (017-002-00 -2) 231-595-7 | Skin Corr. 1B (H314) Eye Irrit. 2 (H319) STOT SE 3 (H335) | Eye Irrit. 2 :: 1%<=C<3% Skin Corr. 1B :: C>=5% Skin Irrit. 2 :: 1%<=C<5% STOT SE 3 :: C>=10% | - | - |
| 5-Chloro-2-methyl-3 (2H)-isothiazolone, mixture with 2-methyl-3(2H)-isoth iazolone 55965-84-9 | 0.01 | Not available | (613-167-00 -5) | Acute Tox. 3 (H311) Acute Tox. 3 (H331) | Eye Irrit. 2 :: 0.06%<=C<0.6 % Skin Corr. 1C :: C>=0.6% Skin Irrit. 2 :: | 100 | 100 |

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R7 - Diluent (80ml)

| | | | | (EUH071) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) | Skin Sens. 1A :: C>=0.0015% Eye Dam. 1 :: C>=0.6% | | |
|-------------------------------|---------|---------------|---------------------------------|---|---|---|---|
| Sodium hydroxide 1310-73-2 | < 0.001 | Not available | (011-002-00 -6) 215-185-5 | Skin Corr. 1A (H314) Eye Dam. 1 (H318) | Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2% | - | - |

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 | Inhalation LC50 - 4 |
|---|-----------------|----------------|--|-----------------------------|---|
| Sodium chloride 7647-14-5 | 3000 | mg/kg 10000 | Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: ECHA API) | hour - vapour - mg/L >42 | hour - gas - ppm 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 | | 87.12 | No data available | No data available | No data available |
| Sodium hydroxide 1310-73-2 | 325 | 1350 | 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.

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R7 - Diluent (80ml)

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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.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

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

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

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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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 |
|----------------------------|-----------------------------|-------------------------------|--------------------------------|------------------------------|------------------------------|
| Hydrochloric acid | TWA: 5 ppm | TWA: 5 ppm | TWA: 5 ppm | STEL: 10 ppm | TWA: 5 ppm |
| 7647-01-0 | TWA: 8 mg/m ³ | TWA: 8 mg/m ³ | TWA: 8 mg/m ³ | STEL: 15.0 mg/m ³ | TWA: 8 mg/m ³ |
| | STEL: 10 ppm | STEL 10 ppm | STEL: 10 ppm | TWA: 5 ppm | STEL: 10 ppm |
| | STEL: 15 mg/m ³ | STEL 15 mg/m ³ | STEL: 15 mg/m ³ | TWA: 8.0 mg/m ³ | STEL: 15 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-i | - | TWA: 0.05 mg/m ³ | - | - | - |
| sothiazolone, mixture with | | Sh+ | | | |
| 2-methyl-3(2H)-isothiazol | | | | | |
| one | | | | | |
| 55965-84-9 | | | | | |
| Sodium hydroxide | - | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ | TWA: 2.0 mg/m ³ | STEL: 2 mg/m ³ |
| 1310-73-2 | | STEL 4 mg/m ³ | | | |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| Hydrochloric acid | STEL: 10 ppm | TWA: 8 mg/m ³ | STEL: 5 ppm | TWA: 5 ppm | STEL: 5 ppm |
| 7647-01-0 | STEL: 15 mg/m ³ | Ceiling: 15 mg/m ³ | STEL: 8 mg/m ³ | TWA: 8 mg/m ³ | STEL: 7.6 mg/m ³ |
| | TWA: 5 ppm | | | STEL: 10 ppm | |
| | TWA: 8 mg/m ³ | | | STEL: 15 mg/m ³ | |
| Sodium hydroxide | = | TWA: 1 mg/m ³ | Ceiling: 2 mg/m ³ | TWA: 1 mg/m ³ | Ceiling: 2 mg/m ³ |
| 1310-73-2 | | Ceiling: 2 mg/m ³ | | STEL: 2 mg/m ³ | |
| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
| Hydrochloric acid | STEL: 5 ppm | TWA: 2 ppm | TWA: 2 ppm | TWA: 5 ppm | TWA: 8 mg/m ³ |
| 7647-01-0 | STEL: 7.6 mg/m ³ | TWA: 3 mg/m ³ | TWA: 3.0 mg/m ³ | TWA: 7 mg/m ³ | STEL: 16 mg/m ³ |
| | | | Peak: 4 ppm | STEL: 5 ppm | |
| | | | Peak: 6 mg/m ³ | STEL: 7 mg/m ³ | |
| Sodium hydroxide | TWA: 2 mg/m ³ | - | - | TWA: 2 mg/m ³ | TWA: 1 mg/m ³ |
| 1310-73-2 | | | | STEL: 2 mg/m ³ | STEL: 2 mg/m ³ |
| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
| Sodium chloride | - | - | - | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ |
| 7647-14-5 | | | | | |
| Hydrochloric acid | TWA: 8 mg/m ³ | TWA: 5 ppm | Ceiling: 2 ppm | TWA: 5 ppm | TWA: 5 ppm |
| 7647-01-0 | TWA: 5 ppm | TWA: 8 mg/m ³ | Ceiling: 2.9 mg/m ³ | TWA: 8 mg/m ³ | TWA: 8 mg/m ³ |
| | STEL: 10 ppm | STEL: 10 ppm | | STEL: 10 ppm | STEL: 10 ppm |
| | STEL: 15 mg/m ³ | STEL: 15 mg/m ³ | | STEL: 15 mg/m ³ | STEL: 15 mg/m ³ |
| Sodium hydroxide | STEL: 2 mg/m ³ | - | Ceiling: 2 mg/m ³ | TWA: 0.5 mg/m ³ | Ceiling: 2 mg/m ³ |
| 1310-73-2 | | | | | |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| Hydrochloric acid | STEL: 10 ppm | STEL: 10 ppm | TWA: 8 mg/m ³ | Ceiling: 5 ppm | STEL: 10 mg/m ³ |
| 7647-01-0 | STEL: 15 mg/m ³ | STEL: 15 mg/m ³ | STEL: 15 mg/m ³ | Ceiling: 7 mg/m ³ | TWA: 5 mg/m ³ |

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| | T۱ | VA: 5 ppm | TWA: 5 ppm | | | | |
|---------------------------------|-------|--------------------------|----------------------------|-------------------------------|----------------|-----------------------|----------------------------|
| | TW | /A: 8 mg/m ³ | TWA: 8 mg/m ³ | | | | |
| Sodium hydroxide | | - | - | - | Ceiling | : 2 mg/m ³ | STEL: 1 mg/m ³ |
| 1310-73-2 | | | | | | J | TWA: 0.5 mg/m ³ |
| Chemical name | | Portugal | Romania | Slovakia | Slo | venia | Spain |
| Hydrochloric acid | T۱ | VA: 5 ppm | TWA: 5 ppm | TWA: 5 ppm | TWA | : 5 ppm | TWA: 5 ppm |
| 7647-01-0 | | /A: 8 mg/m ³ | TWA: 8 mg/m ³ | TWA: 8.0 mg/m ³ | | 8 mg/m ³ | TWA: 7.6 mg/m ³ |
| | ST | EL: 10 ppm | STEL: 10 ppm | Ceiling: 15 mg/m ³ | STEL | : 10 ppm | STEL: 10 ppm |
| | STE | L: 15 mg/m ³ | STEL: 15 mg/m ³ | | STEL: | 15 mg/m ³ | STEL: 15 mg/m ³ |
| | Ce | iling: 2 ppm | | | | J | Ů |
| Sodium hydroxide | Ceil | ing: 2 mg/m ³ | TWA: 1 mg/m ³ | TWA: 2 mg/m ³ | | - | STEL: 2 mg/m ³ |
| 1310-73-2 | | | STEL: 3 mg/m ³ | | | | - |
| Chemical name | | Sı | weden | Switzerland | | Uni | ted Kingdom |
| Hydrochloric acid | | NG\ | /: 2 ppm | TWA: 2 ppm | | T | WA: 1 ppm |
| 7647-01-0 | | NGV: | : 3 mg/m ³ | TWA: 3 mg/m ³ | 1 | TV | VA: 2 mg/m³ |
| B | | Bindande | KGV: 4 ppm | STEL: 4 ppm | | s s | TEL: 5 ppm |
| | | Bindande | KGV: 6 mg/m ³ | STEL: 6 mg/m ² | 3 | ST | EL: 8 mg/m ³ |
| 5-Chloro-2-methyl-3(2H)-isothia | | - | | S+ | | | - |
| zolone, mixture with | | | | TWA: 0.2 mg/m | 13 | | |
| 2-methyl-3(2H)-isothiazo | olone | | | STEL: 0.4 mg/m | 1 ³ | | |
| 55965-84-9 | | | | | | | |
| Sodium hydroxide | | | : 1 mg/m³ | TWA: 2 mg/m ³ | | ST | EL: 2 mg/m ³ |
| 1310-73-2 | | Bindande | KGV: 2 mg/m ³ | STEL: 2 mg/m ² | 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 state Liquid
Appearance Liquid
Colour red
Odour Odourless.

Odour threshold No information available

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No information available

None known

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 None known

Flammability Limit in Air

Upper flammability or explosive

limits

Lower flammability or explosive

No data available

No data available

limits

No data available None known Flash point **Autoignition temperature** No data available None known **Decomposition temperature** None known 7.6 None known

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

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

No data available **Liquid Density** Relative vapour density No data available

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

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

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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

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) | - |
| Sodium hydroxide | = 325 mg/kg (Rat) | = 1350 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.

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STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties 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 toxicityContains 0.00525 % 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) | | |
| Sodium hydroxide | - | LC50: =45.4mg/L (96h, | - | - |
| | | Oncorhynchus mykiss) | | |

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

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

12.4. Mobility in soil

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No information available. Mobility in soil

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 | |
| Sodium hydroxide | 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

<u>IATA</u>

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

14.6 Special Precautions for 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

RID

| 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

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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

France

Occupational Illnesses (R-463-3, France)

| o o o a patrioritar introducto (11 100 c) 1 rainto o | | |
|--|------------------|-------|
| Chemical name | French RG number | Title |
| Sodium chloride | RG 78 | - |
| 7647-14-5 | | |

European Union

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

Authorisations and/or restrictions on use:

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

| | Chemical name | Restricted substance per REACH | Substance subject to authorisation per |
|------|--|--------------------------------|--|
| | | Annex XVII | REACH Annex XIV |
| | Hydrochloric acid - 7647-01-0 | 75. | - |
| 5-CI | hloro-2-methyl-3(2H)-isothiazolone, mixture with | 75. | - |
| | 2-methyl-3(2H)-isothiazolone - 55965-84-9 | | |
| | Sodium hydroxide - 1310-73-2 | 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)

| 2100144111044010110galation (20)110 02012012 (21 11) | |
|--|---|
| 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 |

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| liquid-cooling and processing systems Product-type 12: |
|--|
| Slimicides Product-type 13: Working or cutting fluid |
| preservatives |

International Inventories Contact supplier for inventory compliance status

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 Calculation method Acute dermal toxicity 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)

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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 11-May-2023

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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