

# SAFETY DATA SHEET



Revision date 31-Aug-2022

Revision Number 1.1

## 1. Identification

### Product identifier

**Product Name** XT MOPS Running Buffer

### Other means of identification

**Catalog Number(s)** 1610788, 1610788S, 1610788EDU, 1610788XTU

### Recommended use of the chemical and restrictions on use

**Recommended use** Laboratory chemicals

### Details of the supplier of the safety data sheet

#### Corporate Headquarters

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

#### Manufacturer Address

Bio-Rad Laboratories, Life Science Group  
2000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories  
Life Science  
2000 Alfred Nobel Drive  
Hercules, California 94547

**Technical Service** 1-800-424-6723  
support@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC USA: 1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

|  |             |
|--|-------------|
| Skin corrosion/irritation                        | Category 2  |
| Serious eye damage/eye irritation                | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3  |

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Warning

#### Hazard statements

Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation



|                                    |                              |                      |
|------------------------------------|------------------------------|----------------------|
| <b>Appearance</b> aqueous solution | <b>Physical state</b> Liquid | <b>Odor</b> Odorless |
|------------------------------------|------------------------------|----------------------|

**Precautionary Statements - Prevention**

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of water and soap  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell

**Precautionary Statements - Storage**

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

**Precautionary Statements - Disposal**

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

**Other information**

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

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Chemical name   | CAS No    | Weight-% | Trade secret |
|---|-----------|----------|--------------|
| 1,3-Propanediol,<br>2-[bis(2-hydroxyethyl)amino]-2-(hydroxymethyl)- | 6976-37-0 | 20 - 35  | *            |
| Sodium lauryl sulfate   | 151-21-3  | 1 - 2.5  | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

**Inhalation**

Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

**Skin contact**

Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

**Ingestion** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

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

**Most important symptoms and effects, both acute and delayed**

**Symptoms** May cause redness and tearing of the eyes. Burning sensation.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards arising from the chemical** No information available.

**Explosion data**  
**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

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

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

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

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

**Methods and material for containment and cleaning up**

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

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

**Conditions for safe storage, including any incompatibilities**

|                           |   |
|---------------------------|---|
| <b>Storage Conditions</b> | Keep containers tightly closed in a dry, cool and well-ventilated place. Store according to product and label instructions. |
|---------------------------|---|

## 8. Exposure controls/personal protection

### Control parameters

|                        |   |
|------------------------|---|
| <b>Exposure Limits</b> | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|------------------------|---|

### Appropriate engineering controls

|                             |   |
|-----------------------------|---|
| <b>Engineering controls</b> | Showers<br>Eyewash stations<br>Ventilation systems. |
|-----------------------------|---|

### Individual protection measures, such as personal protective equipment

|                                       |  |
|---------------------------------------|--|
| <b>Eye/face protection</b>            | If splashes are likely to occur, wear safety glasses with side-shields.  |
| <b>Hand protection</b>                | Wear suitable gloves. Impervious gloves.   |
| <b>Skin and body protection</b>       | Wear suitable protective clothing. Long sleeved clothing.  |
| <b>Respiratory protection</b>         | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>General hygiene considerations</b> | Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.                             |

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | aqueous solution         |
| <b>Color</b>          | colorless                |
| <b>Odor</b>           | Odorless                 |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                               | <u>Values</u>     | <u>Remarks • Method</u> |
|---|-------------------|-------------------------|
| <b>pH</b>                                     | 6.9               |                         |
| <b>Melting point / freezing point</b>         | No data available | None known              |
| <b>Boiling point / boiling range</b>          | > 100 °C / 212 °F |                         |
| <b>Flash point</b>                            | No data available | None known              |
| <b>Evaporation rate</b>                       | No data available | None known              |
| <b>Flammability (solid, gas)</b>              | No data available | None known              |
| <b>Flammability Limit in Air</b>              |                   | None known              |
| <b>Upper flammability or explosive limits</b> | No data available |                         |
| <b>Lower flammability or explosive limits</b> | No data available |                         |
| <b>Vapor pressure</b>                         | No data available | None known              |
| <b>Vapor density</b>                          | No data available | None known              |
| <b>Relative density</b>                       | No data available | None known              |
| <b>Water solubility</b>                       | Miscible in water |                         |
| <b>Solubility(ies)</b>                        | No data available | None known              |

|                           |                   |            |
|---------------------------|-------------------|------------|
| Partition coefficient     | No data available | None known |
| Autoignition temperature  | No data available |            |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity       | No data available | None known |
| Dynamic viscosity         | No data available | None known |

**Other information**

|                      |                          |
|----------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point      | No information available |
| Molecular weight     | No information available |
| VOC content          | No information available |
| Liquid Density       | No information available |
| Bulk density         | No information available |

## 10. Stability and reactivity

|                                    |  |
|------------------------------------|--|
| Reactivity                         | No information available.                            |
| Chemical stability                 | Stable under normal conditions.                      |
| Possibility of hazardous reactions | None under normal processing.                        |
| Conditions to avoid                | None known based on information supplied.            |
| Incompatible materials             | Strong acids. Strong bases. Strong oxidizing agents. |
| Hazardous decomposition products   | None known based on information supplied.            |

## 11. Toxicological information

**Information on likely routes of exposure****Product Information**

|              |   |
|--------------|---|
| Inhalation   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.  |
| Eye contact  | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain. |
| Skin contact | Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).  |
| Ingestion    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.             |

**Symptoms related to the physical, chemical and toxicological characteristics**

|          |   |
|----------|---|
| Symptoms | Redness. May cause redness and tearing of the eyes. |
|----------|---|

**Acute toxicity****Numerical measures of toxicity**

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

|                               |                 |
|-------------------------------|-----------------|
| ATEmix (oral)                 | 64,400.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 28.30 mg/l      |

**Component Information**

| Chemical name                     | Oral LD50            | Dermal LD50            | Inhalation LC50                      |
|-----------------------------------|----------------------|------------------------|--------------------------------------|
| Sodium lauryl sulfate<br>151-21-3 | = 1288 mg/kg ( Rat ) | = 200 mg/kg ( Rabbit ) | > 3900 mg/m <sup>3</sup> ( Rat ) 1 h |

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

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Classification based on data available for ingredients. Causes skin irritation.        |
| <b>Serious eye damage/eye irritation</b> | Classification based on data available for ingredients. Causes serious eye irritation. |
| <b>Respiratory or skin sensitization</b> | No information available.  |
| <b>Germ cell mutagenicity</b>            | No information available.  |
| <b>Carcinogenicity</b>                   | No information available.  |
| <b>Reproductive toxicity</b>             | No information available.  |
| <b>STOT - single exposure</b>            | May cause respiratory irritation.  |
| <b>STOT - repeated exposure</b>          | No information available.  |
| <b>Aspiration hazard</b>                 | No information available.  |
| <b>Other adverse effects</b>             | No information available.  |
| <b>Interactive effects</b>               | No information available.  |

**12. Ecological information**

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

| Chemical name                     | Algae/aquatic plants   | Fish  | Toxicity to microorganisms | Crustacea                           |
|-----------------------------------|--|---|----------------------------|-------------------------------------|
| Sodium lauryl sulfate<br>151-21-3 | EC50: 3.59 - 15.6mg/L (96h, Pseudokirchneriella subcapitata)<br>EC50: 30 - 100mg/L (96h, Desmodesmus subspicatus)<br>EC50: =117mg/L (96h, Pseudokirchneriella subcapitata)<br>EC50: =53mg/L (72h, Desmodesmus subspicatus) | LC50: 10.2 - 22.5mg/L (96h, Pimephales promelas)<br>LC50: 10.8 - 16.6mg/L (96h, Poecilia reticulata)<br>LC50: 13.5 - 18.3mg/L (96h, Poecilia reticulata)<br>LC50: 15 - 18.9mg/L (96h, Pimephales promelas)<br>LC50: 22.1 - 22.8mg/L (96h, Pimephales promelas)<br>LC50: 4.06 - 5.75mg/L (96h, Lepomis macrochirus)<br>LC50: 4.2 - 4.8mg/L (96h, | -                          | EC50: =1.8mg/L (48h, Daphnia magna) |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | Lepomis macrochirus)<br>LC50: 4.3 - 8.5mg/L (96h,<br>Oncorhynchus mykiss)<br>LC50: 5.8 - 7.5mg/L (96h,<br>Pimephales promelas)<br>LC50: 6.2 - 9.6mg/L (96h,<br>Pimephales promelas)<br>LC50: 8 - 12.5mg/L (96h,<br>Pimephales promelas)<br>LC50: 9.9 - 20.1mg/L<br>(96h, Brachydanio rerio)<br>LC50: =1.31mg/L (96h,<br>Cyprinus carpio)<br>LC50: =4.2mg/L (96h,<br>Oncorhynchus mykiss)<br>LC50: =4.5mg/L (96h,<br>Lepomis macrochirus)<br>LC50: =4.62mg/L (96h,<br>Oncorhynchus mykiss)<br>LC50: =7.97mg/L (96h,<br>Brachydanio rerio) |  |  |
|--|--|--|--|--|

**Persistence and degradability** No information available.

#### Bioaccumulation

##### Component Information

| Chemical name   | Partition coefficient |
|---|-----------------------|
| 1,3-Propanediol, 2-[bis(2-hydroxyethyl)amino]-2-(hydroxymethyl)-<br>6976-37-0 | -2.26                 |
| Sodium lauryl sulfate<br>151-21-3   | 1.6                   |

**Other adverse effects** No information available.

### 13. Disposal considerations

#### 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.

### 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. Regulatory information

### International Inventories

Contact supplier for inventory compliance status

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

| Chemical name                              | New Jersey | Massachusetts | Pennsylvania |
|--|------------|---------------|--------------|
| Water<br>7732-18-5                         | -          | -             | X            |
| Ethylenediaminetetraacetic acid<br>60-00-4 | X          | X             | X            |

### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## 16. Other information

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

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

##### **Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

#### **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)  
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)  
Australia 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)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 31-Aug-2022

**Revision Note** Reformatted and updated existing information.

**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**