# SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 2025
Date Updated: September 24, 2025

## SECTION 1. - - - - - - - - - PRODUCT AND COMPANY IDENTIFICATION- - - - - - - - - -

| | |
|---|---|
| **Product Name** | 5x RIPA Buffer IV with PEG t-octylphenyl ether (n = 9-10), (pH 7.4) |
| **Product Code(s)** | RB4478 |
| **Recommended Use** | For Laboratory Research Use Only<br>Not for Human or Animal Drug Use |
| **Supplier** | Bio Basic Inc. |
| **Address** | 20 Konrad Crescent, Markham, Ontario,<br>Canada, L3R 8T4 |
| **Telephone** | (905) 474 4493 |
| **Fax** | (905) 474 5794 |
| **For Chemical Emergency Phone#** | (416) 995 9730 |

## SECTION 2. - - - - - - - - - - HAZARDS IDENTIFICATION - - - - - - - - -

**GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)**

Eye irritation (Category 2A), H319
Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

**GHS Label elements, including precautionary statements**

Pictogram

Signal word Warning

Hazard statement(s)

| | |
|---|---|
| H319 | Causes serious eye irritation. |
| H401 | Toxic to aquatic life |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P264 | Wash skin thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear eye protection/ face protection. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## SECTION 3. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - - -

**Mixtures**

| Chemical Name | EC No. | CAS-No | Weight % |
|---|---|---|---|
| Tris-HCl | | 1185-53-1 | 3.0 |
| NaCl | | 7647-14-5 | 4.4 |
| PEG t-octylphenyl ether (n = 9-10) | | 9002-93-1 | 5 |
| Sodium dodecyl sulfate | | 151-21-3 | <0.5 |

## SECTION 4. - - - - - - - - - - FIRST-AID MEASURES- - - - - - - - - - -

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air.

**In case of skin contact**
Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contact lenses.

**If swallowed**
Never give anything by mouth to an unconscious person. Immediately make victim drink water (two glasses at most). Consult a physician.

**Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Protection of first-aiders**
For personal protection see section 8.

**Notes to physician**
No data available

## SECTION 5. - - - - - - - - - FIRE FIGHTING MEASURES - - - - - - - - - -

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

**Special hazards arising from the substance or mixture**
Not combustible.
Ambient fire may liberate hazardous vapours.

**Hazardous combustion products**
Carbon oxides.

**Advice for firefighters**
Wear self-contained breathing apparatus for firefighting.

**Further information**
Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6. - - - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - - - - -

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

Advice for non-emergency personnel:
Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
Advice for emergency responders:
For personal protection see section 8.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

## SECTION 7. - - - - - - - - - - HANDLING AND STORAGE- - - - - - - - - - -

**Precautions for safe handling**

For precautions see section 2.

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

Keep container tightly closed. Keep locked up or in an area accessible only to qualified or authorised persons.

**Recommended storage temperature** 2 - 8 °C

**Storage class (TRGS 510):** 12: Non Combustible Liquids

## SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -

**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Engineering measures :** No data available.

**Personal protective equipment**

**Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm Break through time: 480 min

Splash contact Material:
Nitrile rubber
Minimum layer thickness: 0.11 mm Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**

Impervious clothing. The type of protective equipment must be selected according to the

concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended filter type : Filter type ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

## SECTION 9. - - - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - - - -

**Information on basic physical and chemical properties**

| | | |
|---|---|---|
| a) | Appearance | Form: liquid |
| b) | Color | Colourless |
| c) | Odour | No data available |
| d) | Odour Threshold | No data available |
| e) | pH | No data available |
| f) | Melting point/freezing point | No data available |
| g) | Initial boiling point and boiling range | No data available |
| h) | Flash point | No data available |
| i) | Evaporation rate | No data available |
| j) | Flammability (solid, gas) | No data available |
| k) | Flammability (liquids) | This product is not flammable. |
| l) | Burning rate | No data available |
| m) | Upper/lower flammability or explosive limits | No data available |
| n) | Vapour pressure | No data available |
| o) | Relative vapour density | No data available |
| p) | Relative density | No data available |
| q) | Density | No data available |
| r) | Water solubility | No data available |
| s) | Partition coefficient: n-octanol/water | No data available |
| t) | Auto-ignition temperature | No data available |
| u) | Decomposition temperature | No data available |
| v) | Viscosity | No data available |
| | Flow time | No data available |

w) Explosive properties Not classified as explosive.

x) Oxidizing properties None

**Other safety information**
No data available

## SECTION 10. - - - - - - - - -STABILITY AND REACTIVITY - - - - - - - - -

**Reactivity**
No data available

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of hazardous reactions**
Violent reactions possible with:
The generally known reaction partners of water.

**Conditions to avoid**
No data available

**Incompatible materials**
Strong oxidizing agents

**Hazardous decomposition products**
In the event of fire: see section 5

## SECTION 11. - - - - - - - - - TOXICOLOGICAL INFORMATION - - - - - - - -

**Mixture**

**Acute toxicity**
Oral: No data available
Acute toxicity estimate Oral - >2,000mg/kg (Calculation method)
Symptoms: Possible symptoms: mucosal irritations
Acute toxicity estimate Dermal - > 2,000 mg/kg (Calculation method)

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
Remarks: Mixture causes serious eye irritation.

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
No data available

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Components**
**PEG t-octylphenyl ether (n = 9-10)**

**Acute toxicity**
LD50 Oral - Rat - 1,900 - 5,000 mg/kg
Symptoms: Vomiting, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Risk of aspiration upon vomiting., Aspiration may cause pulmonary oedema and pneumonitis.
Inhalation: No data available
LD50 Dermal - Rabbit - > 3,000 mg/kg

**Skin corrosion/irritation**
Skin - Rabbit
Result: irritating - 4 h (OECD Test Guideline 404)
Remarks: The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Risk of serious damage to eyes. (Draize Test)
Remarks: Risk of corneal clouding.

**Respiratory or skin sensitization**
Sensitisation test: - Human
Result: negative
Patch test on human volunteers did not demonstrate sensitisation properties.

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
No data available

**Reproductive toxicity**
Ingestion of excessive amounts by pregnant animals resulted in maternal and foetal toxicity. Did not show teratogenic effects in animal experiments.

**Specific target organ toxicity - single exposure**
Acute oral toxicity - Vomiting, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Risk of aspiration upon vomiting. Aspiration may cause pulmonary oedema and pneumonitis.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

## SECTION 12. - - - - - - - - - ECOLOGICAL INFORMATION - - - - - - - - - -

**Ecotoxicity**
**Components**
**PEG t-octylphenyl ether (n = 9-10)**

**Toxicity to fish**
LC50 (Leuciscus idus (Golden orfe)): 0.26 mg/l
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 203

GLP: yes
Remarks: The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

**Toxicity to daphnia and other aquatic invertebrates**
EC50 (Daphnia magna (Water flea)): 0.011 mg/l
Exposure time: 48 h
Test Type: static test
Remarks: (ECOTOX Database)
The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

**Toxicity to algae/aquatic plants**
EC50 (Pseudokirchneriella subcapitata (green algae)):
1.9 mg/l
Exposure time: 96 h
Test Type: static test
GLP: yes
Remarks: (ECHA)
The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

**M-Factor (Acute aquatic toxicity) :** 10

**Toxicity to fish (Chronic toxicity)**
NOEC (Danio rerio (zebra fish)): 0.012 mg/l
Test Type: flow-through test
Analytical monitoring: yes
Method: OECD Test Guideline 210
Remarks: The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**
NOEC (Daphnia magna (Water flea)): 0.03 mg/l
End point: reproduction rate
Exposure time: 21 d
Test Type: semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes
Remarks: The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

**M-Factor (Chronic aquatic toxicity) :** 1

**Persistence and degradability**

**Components:**
**PEG t-octylphenyl ether (n = 9-10)**

**Biodegradability**
aerobic
Inoculum: activated sludge
Concentration: 100 mg/l
Result: Not readily biodegradable.
Biodegradation: 22 %
Exposure time: 28 d
Method: OECD Test Guideline 301C

**Bioaccumulative potential**
No data available

**Mobility in soil**
No data available

**Other adverse effects**

**Components:**
**PEG t-octylphenyl ether (n = 9-10)**

**Additional Ecological Information**
Causes endocrine disruption
Discharge into the environment must be avoided

## SECTION 13. - - - - - - - - - DISPOSAL CONSIDERATIONS - - - - - - - - -

**Disposal methods**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14. - - - - - - - - - - TRANSPORT INFORMATION - - - - - - - - -

**TDG (Canada)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

## SECTION 15. - - - - - - - - - REGULATORY INFORMATION - - - - - - - - - -

**NPRI Components :** PEG t-octylphenyl ether (n = 9-10)

**Canadian lists**
No substances are subject to a Significant New Activity Notification.

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

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## SECTION 16. - - - - - - - - - - OTHER INFORMATION- - - - - - - - - - -

Further information: no limited for paper copy, just for internal uses.
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

**Disclaimer**

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**Issuing Date:** 24-Sept-2025

**End of SDS**