

MATERIAL SAFETY DATA SHEET
Prepared according to 1907/2006/EC, Article 31

Printed: 20.11.2007

Revised: 20.11.2007

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** *Bradford Reagent, ready-to-use*
- **Application of the substance / the preparation:** *Laboratory chemicals*
- **Manufacturer/Supplier:**
*Fermentas UAB
V.Graiciuno 8
LT-02241 Vilnius
Lithuania
Tel.: +370 5 2602131
Fax.: +370 5 2602142*
- **Further information obtainable from:**
*Please visit our site: <http://www.fermentas.com/>
Contact us: info@fermentas.lt
Or contact Fermentas distributor in your country.*
- **Information in case of emergency:**
*Poison Information Centre, Mainz, Germany,
Tel.: +49 (0)6131 19240 / 24h*

2 Hazards identification

- **Hazard description:**



C Corrosive

- **Information concerning particular hazards for human and environment:**
*The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 34 Causes burns.*
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** *Solution, consisting of the following components.*
- **Components:**

CAS: 7732-18-5 EINECS: 231-791-2	water		>50%
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CAS: 7664-38-2 EINECS: 231-633-2 EU Number: 015-011-00-6	phosphoric acid	 C; R 34 2,5-10%
CAS: 64-17-5 EINECS: 200-578-6 EU Number: 603-002-00-5	ethanol	 F; R 11 2,5-10%

· **Other components:**

Components not listed here are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1999/45/EC.

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

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8 Exposure controls/personal protection

· **Ingredients with limit values that require monitoring at the workplace:**

7664-38-2 phosphoric acid

IOELV	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³
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· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form:	Solution
Colour:	Dark blue
Odour:	Alcohol-like

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· **Flash point:** > 55°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined.

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| · Solubility in / Miscibility with water: | Fully miscible. |
| · pH-value at 20°C: | < 2 |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions:** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralized.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|---|---|
| · Land transport ADR/RID (cross-border): | |
| · ADR/RID class: | - |

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· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives.

· **Code letter and hazard designation of product:**

C Corrosive

· **Risk phrases:**

34 Causes burns.

· **Safety phrases:**

20 When using do not eat or drink.

23 Do not breathe gas/fumes/vapour/spray.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

60 This material and its container must be disposed of as hazardous waste.

16 Other information

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Fermentas is not held liable for any damage resulting from handling or from contact with the above mentioned products.

MSDS has been prepared in accordance with EC regulation 1907/2006/EC and other European Union legislation in force.

· **Relevant R-phrases**

11 Highly flammable.

34 Causes burns.