



MATERIAL SAFETY DATA SHEET

According to EC Directive 91/155 EC

Date: 01/05/10

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

1.1 Product Details:

Trade Name: Crystal PBS Buffer

Catalog Number: BIO-37107, 0.5 litre
 BIO-37108, 1 litre

1.2 Company Details:

Manufacturer/ Supplier: Bioline
 16 The Edge Business Centre
 Humber Road
 London
 NW2 6EW
 Tel: +44 (0)20 8830 5300
 Fax: +44 (0)20 8452 2822

Further Information Obtainable from:
 Technical Services
 Details as above

1.3 Emergency Details:

24-Hour Contact in case of emergency:
 Vergiftungs-Informations-Zentrale
 Mathilden Strasse 1
 79106 Freiburg
 GERMANY
 Tel: +49 (0) 761 19240.

2. Composition/ Information on Ingredients

2.1 Chemical Characterization:

PBS Tablets

| CAS # | EINECS # | EU Classification |
|-------|----------|-------------------|
| N/A | N/A | N/A |

Symbol: Xi

R phrase: R36/37/38

3. Hazards Identification

3.1 Precautionary Statements:

Health Effects:

May cause respiratory tract, eye and skin irritation.

4. First Aid Measures

4.1 After Inhalation:

Remove victim to fresh air. Give oxygen if breathing becomes difficult. Should breathing stop, give artificial respiration. Get medical aid if cough or other symptoms appear.

4.2 After Swallowing:

Immediately flush mouth with plenty of water. Get medical attention.

4.3 After Contact with Eyes:

Immediately flush eyes with copious amounts of water for at least 15 minutes. Consult a doctor if irritation persists.

4.4 After Contact with Skin:

Wash contaminated areas with large volumes of soap and water.

Repeated or prolonged exposure is not known to aggravate medical condition.

5. Fire Fighting Measures

5.1 Suitable Extinguishing Media:

Small fire: Use dry chemical powder. Large fire: Use water spray, fog or foam. Do not use water jet.

5.2 Fire Fighting Protective Measures:

Wear self-contained breathing apparatus MSHA/NIOSH (approved or equivalent), and protective garments.

5.3 Special Exposure Hazards:

These products are nitrogen oxides (NO, NO₂...).

6. Accidental Release Measures

6.1 Personal Precautions:

Wear self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent), chemical safety goggles, rubber boots, and heavy rubber gloves.

6.2 Clean-up Measures:

Sweep up or absorb material, then place a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface.

7. Handling and Storage

7.1 Handling:

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. Do not

breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.

7.2 Storage:

Store tightly closed at room temperature.

8. Exposure Controls/ Personal Protection

8.1 Engineering Measures:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

8.2 Personal Protection:

Wear appropriate NIOSH / MSHA-Approved respirator, chemical resistant gloves, chemical safety goggles.

Hygiene Practices: Avoid contact with skin or eyes. Do not place in mouth. Do not eat, drink or smoke when handling this product. Upon completion of the use of this product, dispose of protective gloves safely and wash hands thoroughly with soap and water.

9. Physical and Chemical Properties

Appearance: White Solid

10. Stability and Reactivity

10.1 Stability

Product is stable under normal handling and storage conditions.

Hazardous, combustion or decomposition products: These products are nitrogen oxides (NO, NO₂...).

11. Toxicological Information

No toxicity known

12. Ecological Information

12.1 Environmental Effects

Environmental Fate/Stability: Unknown

Effects on Plants or Animals: Unknown

12.2 Water Hazard

Unknown

13. Disposal Considerations

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

14. Transport Information

RID/ADR

No information available

IMDG

No information available

IATA

No information available

15. Regulatory Information

15.1 Labelling According to EU Guidelines

European Labeling in Accordance with EC Directives

Hazard Symbols: Xi - irritant

Risk Phrases: R 36/37/38 Irritating to eyes, respiratory system and skin.

R22: Harmful if swallowed

Safety Phrases: S26 - In case of contact with eyes, immediately flush with plenty of water and seek medical advice.

S36 - Wear suitable protective clothing.

16. Other Information

The information provided in this Material Safety Data Sheet (MSDS) is accurate to the best of our present knowledge. However, this shall not constitute a guarantee for any specific product features. All substances and preparations may present unknown hazards and should be used with caution. Bioline shall not be held liable for any damage resulting from the handling of or contact with the above product. The information supplied in this MSDS shall not establish a legally valid contractual relationship.