



## **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: HyperPAGE

Catalog Number: BIO-33065, 10 lanes  
BIO-33066, 50 lanes

#### 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:

Dangerous component:

DITHIOTHREITOL

CAS #	EINECS #	EU Classification
3483-12-3	222-468-7	Xi; R36/37/38

SODIUM DODECYL SULFATE

CAS #	EINECS #	EU Classification
151-21-3	205-788-1	Xn: R22, Xi: R36/38

### 3. Hazards Identification

#### 3.1 Precautionary Statements:

##### Health Effects:

Inhalation: May cause irritation to the upper respiratory system. Symptoms may include coughing and scratchy throat.

Skin: Can cause irritation on prolonged or repeated contact. Symptoms may include redness, rash, and itching.

Eyes: Can cause eye irritation. Symptoms include redness, tearing, and pain.

Ingestion: May cause nausea and discomfort.

Chronic Effects/Target Organ Effects: Excessive exposure to dithiothreitol may result in blood in urine, difficulty breathing, irregular heartbeat, anaemia, weakness, drunkenness, bluish skin color, lung congestion, kidney damage, paralysis, convulsions unconsciousness and coma.

Thiols may cause central nervous system depression (CNS). Sodium dodecyl sulfate and proteins are possible allergens.

Medical Conditions Aggravated By Exposure: None known

### 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:

Keep victim warm and calm. Do not induce vomiting unless directed by medical personnel. Consult a doctor immediately.

#### 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 for at least 15 minutes as contaminated clothing is removed. Get medical attention if area remains irritated. Do not wear contaminated clothing until after it has been properly cleaned.

### 5. Fire Fighting Measures

#### 5.1 Suitable Extinguishing Media:

Water spray, fire-fighting foam, CO<sub>2</sub> or dry chemical powder.

#### 5.2 Fire Fighting Protective Measures:

Wear self-contained breathing apparatus MSHA/NIOSH (approved or equivalent), and protective garments. If possible, have this product removed from the fire scene.

#### 5.3 Special Exposure Hazards:

The product is expected to burn under fire conditions generating toxic and irritating gases and smoke. Evacuate area and fight fire from safe distance.

### 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 Environmental Precautions:

Do not allow to enter the surface or ground water. Do not allow to enter sewers.

## 6.3 Clean-up Measures:

Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.

### 7. Handling and Storage

#### 7.1 Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

#### 7.2 Storage:

Store tightly closed at -20°C.

## 8. Exposure Controls/ Personal Protection

### 8.1 Engineering Measures:

Mechanical exhaust required. Keep tightly closed. See section 7.

### 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: Purple solid

Odor: None

Flash Point: Not available

Viscosity: Not available

Solubility: Not available

Density: Not available

Boiling Point: Not available

Melting Point: Not available

pH: Not available

## 10. Stability and Reactivity

### 10.1 Stability

Product is stable under normal handling and storage conditions.

### 10.2 Reactivity

Substances to avoid: Acids, bases and strong oxidizers.

Hazardous, combustion or decomposition products: Chloride, oxides of sulfur and carbon, smoke.

## 11. Toxicological Information

**Sodium dodecyl sulfate:** Dermal LD<sub>50</sub>: 10,000 mg/kg (rabbit); Inhalation LC<sub>50</sub>: >3900 mg/m<sup>3</sup>/1-hr (rat); Oral LD<sub>50</sub>: 1288 mg/kg (rat); Skin irritation: 250 mg/24-hr - mild (human);

skin irritation: 50 mg/24-hr - severe (rabbit), 250 mg/24-hr - moderate (rabbit), 50 mg/24-hr - mild (rabbit); eye irritation: 100 mg/24H - moderate (rabbit), 10 mg - moderate (rabbit)

## 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: Xn – harmful; Xi - irritant

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

R22: Harmful if swallowed

## 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.