



A Meridian Life Science® Company

## **MATERIAL SAFETY DATA SHEET**

According to EC Directive 91/155 EC

Date: 23/06/11

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

#### **1.1 Product Details:**

Trade Name: **BL21 ComboPack Competent Cells**

Catalogue Number: BIO-85035 1.5ml (15 x 100µl)

Components: BL21 (DE3) competent cells  
BL21 (DE3) pLysS competent cells  
BL21 (DE3) pLysE competent cells  
pUC19 Control DNA

#### **1.2 Company Details:**

Manufacturer/ Supplier:

Bioline  
16 The Edge Business Centre  
Humber Rd.  
London  
NW2 6EW  
Tel: +44 20 8830 5300  
Fax: +44 20 8452 2822

Bioline (Aust) Pty Ltd  
Suite 212a,  
National Innovation Centre,  
Australian Technology Park  
EVELEIGH NSW 2015  
Tel: +61 2 92094180  
Fax: +61 2 92094763

Further Information Obtainable from:

Technical Services  
Details as above

#### **1.3 Emergency Details:**

24-Hour Contact in case of emergency:

Vergiftungs-Informationen-Zentrale  
Mathilden Strasse 1  
79106 Freiburg  
GERMANY  
Tel: +49 (0) 761 19240.

## 2. Composition/ Information on Ingredients

Substance Name: The hazards identified with this product are those associated with the following component (s):

Ingredient Name:	CAS No.	EU Symbol	R-phrase	Labels
Calcium Chloride	10035-04-8	Xi	R36	Xi ; R:36, S:(2)- 22 – 24
Glycerol	56-81-5			S25, S36

For additional information on toxicity, please refer to Sec. 11.

## 3. Hazards Identification

NFPA Rating/HMIS Rating  
Health: 1  
Flammability: 0  
Reactivity: 0

### 3.1 Emergency Overview:

Critical hazards: Be harmful if swallowed  
May cause eye irritation

Environment hazards: Not applicable

For additional information on toxicity, please refer to Sec. 11.

## 4. First Aid Measures

### 4.1 Oral Exposure:

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately if swallowed in large quantity of this material.

### 4.2 Inhalation Exposure:

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

### 4.3 Dermal Exposure:

In case of contact, immediately wash skin with soap and copious amounts of water.

### 4.4 Eye Exposure:

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## 5. Fire Fighting Measures

### 5.1 Extinguishing Media:

Suitable: Water spray. Carbon Dioxide, dry chemical powder or appropriate foam.

### 5.2 Special Fire fighting Procedures:

Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### 5.3 Specific Hazard(s):

N/A

### 5.4 Flash point:

N/A

5.5 Flammability:

N/A

5.6 Auto-ignition Temp:

N/A

5.7 Explosion Limits:

N/A

**6. Accidental Release Measures**

6.1 Procedure(s) Of Personal Precaution(s):

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves and Chemical safety goggles.

6.2 Methods For Cleaning Up:

Cover with dry lime, sand, or soda ash. Place in covered containers using nonsparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

6.3 Environmental Precaution(s):

Avoid contaminating water supply. Avoid contaminating sewers and waterways with this material.

6.4 Procedure To Be Followed in Case Of Leak or Spill:

Evacuate area.

**7. Handling and Storage**

7.1 Handling:

Irritating material, avoid contacting and avoid breathing the material.

7.2 User Exposure:

Avoid contacting with eyes. Do not ingest. Wash thoroughly after handling.

7.3 Storage:

Store in -80°C freezer

**8. Exposure Controls/ Personal Protection**

8.1 Engineering Controls:

Safety shower and eye bath. Mechanical exhaust required.

8.2 Personal Protective Equipment:

Government approved respirator.

8.3 Hand:

Compatible chemical-resistant gloves.

8.4 Eye:

Chemical safety goggles.

8.5 Skin Specific:

Chemical resistant

8.6 General Hygiene Measures:

Wash hands thoroughly after handling. Wash contaminated clothing before use.

**9. Physical and Chemical Properties**

9.1 Appearance: Physical State:

Appearance: Translucent liquid solution

Odour: No odour

9.2 Property Value At temperature or Pressure

**BP/BP Range:** N/A

**MP/MP Range:** N/A

**Freezing Point:** N/A

**pH:** N/A

**Vapor Pressure:** N/A

**Vapor Density:** N/A

**Saturated Vapor:** N/A

**SG/Density:** N/A

**Volatile %:** N/A

**Evaporation Rate:** N/A

**Viscosity:** N/A

**Partition Coefficient:** N/A

**Flash Point:** N/A

**Flammability:** N/A

**Solubility in Water:** N/A

**N/A** = not available

**10. Stability and Reactivity**

10.1 Stability:

Stable under normal condition

10.2 Conditions to Avoid:

Moisture.

Excessive heat

10.3 Materials to Avoid:

Acid chlorides, Phosphorus halides, strong oxidizing agents, strong acids, strong reducing agents..

10.4 Hazardous Decomposition Products:

Hydrogen Chloride. Chlorine containing gases. Carbon monoxide. Carbon dioxide. Sulfur dioxides.

10.5 Hazardous Polymerization:

Will not occur.

**11. Toxicological Information**

11.1 Acute Toxicity

Dermal/Skin  
Calcium Chloride: 5mg/m<sup>3</sup>  
Glycerol: 18700mg/kg

11.2 Inhalation/Respiratory:  
Not determined

11.3 Oral/Ingestion:  
Calcium Chloride: 1000mg/kg  
Glycerol: 950mg/kg

11.4 Target organs:  
Eyes, Heart, Kidney

11.5 Carcinogenicity:  
NTP: Not tested  
IARC: Not listed  
OSHA: Not regulated

## **12. Ecological Information**

### 12.1 Acute Ecotoxicity Tests

**Test Type:** LC<sub>50</sub> Fish  
**Species :** Onchorhynchus mykiss (Rainbow trout)  
**Time:** 96h  
**Value:** 51000~57000 mg/l

**Test Type:** EC<sub>50</sub> Daphnia  
**Species :** Daphnia  
**Value:** 153000 mg/l

**Test Type:** EC<sub>50</sub> algae  
**Species:** *Microcystis aeruginosa* (Blue algae)  
**Time:** 8 days  
**Value:** > 2900 mg/l

**Test Type:** LC<sub>50</sub> Fish  
**Species:** Carassius auratus (Goldfish)  
**Time:** 24 h  
**Value:** 5000 mg/l

## **13. Disposal Considerations**

### 13.1 Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.  
Observe all federal, state and local environmental regulations.

## **14. Transport Information**

### 14.1 DOT

Proper Shipping Name: Not determined  
Class:

Packing Group:  
Hazard Label: None  
PIH: Not PIH  
14.2 IATA

Non-Hazardous for Air Transport: non-hazardous for air transport.

## **15. Regulatory Information**

### 15.1 US Classification and Label Text

US Statements: Combustible. Readily absorbed through skin. Target Organ (s):  
Eyes, Skin.

### 15.2 United States Regulatory Information:

**Sara Listed:** No

**TSCA Inventory Item:** Yes

### 15.3 Canada Regulatory Information WHMIS Classification:

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**DSL:** Yes

**NDSL:** No

## **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 from contact with the above product. The information supplied in this MSDS shall not establish a legally valid contractual relationship.