

# Bioland Scientific LLC

## Material Safety Data Sheet

Version 1.0  
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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name **MOPS**

Catalog Number CM02  
Brand Bioland Chemicals

Company Bioland Scientific LLC  
14925 Paramount Blvd., Suite C  
Paramount, CA 90723  
USA

Telephone 1-562-377-2668  
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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 3-(N-Morpholino)propanesulfonic acid; 4-Morpholinepropanesulfonic acid

Formula: C7H15NO4S

Molecular Weight : 209.26 g/mol

Grade: Molecular Biology, DNase, RNase and Protease free

CAS-No.	EC-No.	Index-No.	%
1132-61-2	214-478-5		>99.5%

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

OSHA Hazards: Irritant

#### HMIS Classification

Health Hazard: 2

Flammability: 1

Physical hazards: 0

#### NFPA Rating

Health Hazard: 2

Fire : 1

Reactivity Hazard: 0

#### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** This material will cause skin irritation, resulting in reddening, itching, and inflammation.  
May be absorbed through the skin

**Eyes:** This material can cause eye irritation. Redness, tearing, and blurred vision.

**Ingestion:** If ingested, this material may cause irritation to the mouth, throat and gastrointestinal tract. May be harmful if swallowed.

#### 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**

Move person to fresh air immediately. If not breathing give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water for at least 15 minutes while removing contaminated clothing. Consult a physician.

**In case of eye contact**

Flush eyes with plenty of water for at least 20 minutes. Consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Use personal protective equipment as indicated in Section 8. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

**Environmental precautions**

Do not let product enter drains.

**Methods for cleaning up**

Sweep up material and place in a disposal container.

#### 7. HANDLING AND STORAGE

**Handling**

Avoid contact with skin and eyes. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

**Storage**

Keep containers tightly closed and upright when not in use. Store at dry and cool place.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Personal Protective Equipment**

**Eyes:** Wear safety glasses and chemical goggles if splashing is possible.

**Skin:** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Color & Form: white powder

### Safety data

pH: 3 – 4.5 at (1% aqueous solution) at 25 °C

Melting point: 277 °C

Boiling point: no data available

Flash point: 110 °C

Ignition temperature: no data available

Lower explosion limit: no data available

Upper explosion limit: no data available

Water solubility: 1 M at 20 °C, completely soluble

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** no data available.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong bases.

**Hazardous Decomposition Products:** Nitrogen oxides, carbon oxides, sulphur oxides.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** LD50 Oral – rat ->2,000 mg/kg

**Irritation and corrosion:** no data available

**Sensitization:** no data available

### Carcinogenicity

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs and Symptoms of Exposure

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

### Potential Health Effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**Ingestion** May be harmful if swallowed.

## 12. ECOLOGICAL INFORMATION

**Elimination information:** no data available

**Ecotoxicity effects:** Toxicity to Daphnia and other aquatic invertebrates, EC50 – Daphnia Magna (water flea) - > 100 mg/L -48 hour

**Further information on ecology:** no data available

### 13. DISPOSAL CONSIDERATIONS

**Product:** Dispose of in a manner consistent with federal, state, and local regulations.

**Contaminated packaging:** Dispose of as unused product.

### 14. TRANSPORT INFORMATION

**DOT (US):** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

### 15. REGULATORY INFORMATION

**OSHA Hazards:** Irritant

**DSL Status:** The component of this product is on the Canadian DSL list.

#### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards** No SARA Hazards

**Massachusetts Right To Know Components** No Components Listed

#### **Pennsylvania Right To Know Components**

4-Morpholinepropanesulfonic acid; CAS-No. 1132-61-2

#### **New Jersey Right To Know Components**

4-Morpholinepropanesulfonic acid; CAS-No. 1132-61-2

#### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

### 16. OTHER INFORMATION

#### **Product Use:**

For research use only.

#### **Disclaimer:**

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