

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name **MES Monohydrate**

Catalog Number CM01  
Brand Bioland Chemicals

Company Bioland Scientific LLC  
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Paramount, CA 90723  
USA

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 4-Morpholineethanesulfonic Acid ; 2-(N-Morpholino)ethanesulfonic acid, monohydrate

Formula:  $C_6H_{13}NO_4S \cdot H_2O$   
Molecular Weight : 213.3 g/mol

CAS-No.	EC-No.	Index-No.	%
145224-94-8			>99.5%

### 3. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

#### Hazard Statements

H315 - Causes skin irritation (Category 2)

H319 - Causes serious eye irritation (Category 2A)

H335 - May cause respiratory irritation (Category 3)

#### Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302+ P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

#### 4. FIRST AID MEASURES

##### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Treat symptomatically.

##### **If inhaled**

Move person to fresh air immediately. If breathing becomes difficult, give oxygen.

##### **In case of skin contact**

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

##### **In case of eye contact**

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

##### **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 hazards arising from the substance or mixture**

Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Sulphur oxides

##### **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 contact with skin, eyes and clothing. Ensure adequate ventilation.

##### **Environmental precautions**

Do not let product enter drains.

##### **Methods for cleaning up**

Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

#### 7. HANDLING AND STORAGE

##### **Handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Normal measures for preventive fire protection.

##### **Storage**

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

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

##### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

##### **Personal protective equipment**

###### **Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

###### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form:	white crystalline powder
Physical State	Crystalline Powder
Odor	No information available
Odor Threshold	No information available
Oxidizing Properties	No information available
Decomposition Temperature °C	No information available
Flash Point	Not determined
Evaporation Rate	No data available
MMHG @ 37.8 C	No data available
Vapor Density	No data available
Autoignition Temperature	No data available
Vapor Density	No data available
Specific Gravity	No data available
Freezing Point	No information available
Boiling Point/Range	No data available
Melting Point/Range	No data available
Flammability Limits in Air	No data available
Explosive Properties	No information available
Solubility	No information available
Partition Coefficient (n-octanol/water)	No data available
Viscosity	No information available

## 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.

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

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Product Information Irritating to eye, skin and respiratory system.

### Chronic Toxicity

No known effect based on information supplied

**Target Organ Effects** None known.

**Germ cell mutagenicity:** 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.

**Reproductive toxicity** no data available

### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure

no data available

## 12. ECOLOGICAL INFORMATION

**Elimination information:** no data available

**Ecotoxicity effects:** no data available

**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

### 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

Acute Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

2-(N-Morpholino)ethanesulfonic acid, monohydrate; CAS-No. 145224-94-8

### New Jersey Right To Know Components

2-(N-Morpholino)ethanesulfonic acid, monohydrate; CAS-No. 145224-94-8

### 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

### Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit. Eye irritation

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Skin Irrit. Skin irritation

STOT SE Specific target organ toxicity - single exposure

### HMIS Rating

Health hazard: 2

Chronic Health Hazard:

Flammability: 0

Physical Hazard 0

### NFPA Rating

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

### Product Use:

For research use only.

### Disclaimer:

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