

# BIO SPECTRA

## Safety Data Sheet MOPS

### Section 1 - Chemical Product and Company Identification

#### 1.1 Product Identifiers:

**Product Name:** MOPS

**Catalog Number(s):** MP3201, MP3220, MP4220, MP5201, MP5202, MP5203, MP5204, MP5220, MP7201

**CAS#:** 1132-61-2

**EC#:** 214-478-5

**RTECS:** Not available

**REACH Number:** No registration number is available, the substance or uses of this substance are exempt from registration, annual tonnage registration is not required or it is envisaged for a registration deadline at a later date.

#### 1.2 Recommended Use of the Chemical and Restrictions of Use:

Chemical manufacturing

#### 1.3 Supplier Details:

BioSpectra, Inc.  
100 Majestic Way  
Bangor, PA 18013  
610-599-3400

#### 1.4 Emergency Numbers:

**US & Canada:** 1-800-424-9300

**Outside the US & Canada:** +1 703-527-3887

### Section 2 – Hazard Identification

#### 2.1 Classification of the Substance or Mixture:

**GHS Classification in accordance with 29 CFR 1910:**

Skin irritation (Category 2) H315

Eye irritation (Category 2A) H319

Specific target organ toxicity: single exposure (Category 3),  
Respiratory system H335

#### 2.2 GHS Label Element Including Precautionary Statements:

**Pictogram:**



**Signal Word:** Warning

#### Hazard statement(s):

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

#### Precautionary statement(s):

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

#### Precautionary statement(s) Continued:

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.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P321 Specific Treatment (See supplemental first aid instructions on this SDS).

P362 Take off contaminated clothing and wash before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container to an approved waste disposal plant.

**2.3 Hazards not Classified or not Covered by the GHS:** No information available.

### Section 3 - Composition, Information on Ingredients

#### 3.1 Substances:

**Synonyms:** 3-(N-Morpholino)propanesulfonic acid;

4-Morpholinepropanesulfonic acid

**Formula:** C<sub>7</sub>H<sub>15</sub>NO<sub>4</sub>S

**Molecular Weight:** 209.26 g/mol

**CAS#:** 1132-61-2

**EC#:** 214-478-5

Component	Classification	Concentration
4-Morpholinopropanesulphonic acid	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335	≤100%

#### Section 4 - First Aid Measures

##### 4.1 Description of Necessary First Aid Measures:

**General advice:** Remove from dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Skin:** Immediately wash with plenty of soap and water. Get medical attention.

**Ingestion:** Do not induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person. If victim is conscious wash out mouth with water. Get medical attention.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing provide artificial respiration. If breathing is difficult supply oxygen. Get medical attention.

**4.2 Most Important Symptoms/Effects, Acute and Delayed:** Refer to Section 2.2 for Precautionary Statements if applicable.

**4.3 Indication of Immediate Medical Attention and Special Treatment:** No information available.

#### Section 5 - Firefighting Measures

**5.1 Extinguishing Media:** Water spray, dry chemical, alcohol-resistant foam, or carbon dioxide.

**5.2 Specific Hazards Associated with this Chemical:** Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Sulphur oxides.

**5.3 Special Equipment/Precautions for Firefighters:** May be combustible at high temperatures. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece

operated in the pressure demand or other positive pressure mode. Explosion will appear as fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**5.4 Other Information:** No information available.

#### Section 6 - Accidental Release Measures

##### 6.1 Personal Precautions, Protective Equipment and Emergency

**Procedures:** Ensure adequate ventilation. Use proper personal protective equipment as indicated in Section 8. Avoid formation of dust. Avoid breathing any vapours, mist or gas.

**6.2 Environmental Precautions:** Prevent any additional leakage or spillage if safe to do so. Do not allow to enter drains. Do not discharge to the environment.

**6.3 Methods and Materials for Containment and Cleaning Up:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

**6.4 Other Information:** See Section 13 for disposal considerations.

#### Section 7 - Handling and Storage

**7.1 Precautions for Safe Handling:** Avoid contact with skin and eyes. Use with adequate ventilation. Avoid dust and aerosol formation.

**7.2 Conditions for Storage Including any Incompatibilities:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

**7.3 Other Information:** No information available.

#### Section 8 - Exposure Controls, Personal Protection

**8.1 Control Parameters:** Chemical does not contain any substances with occupational exposure limits.

**8.2 Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

##### 8.3 Personal Protective Measures:

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate gloves to prevent skin exposure. Wear impervious gloves: Nitrile rubber with layer thickness 0.11mm.

**Clothing:** Wear appropriate impervious protective clothing to minimize contact with skin.

**Respirators:** Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Where protection from nuisance levels of dust are desired use type N95 (US) or type P1 (EN143) dust masks.

### Section 9 - Physical and Chemical Properties

<b>Physical State:</b> Solid	<b>Melting Point:</b> 277°C
<b>Appearance:</b> White Powder	<b>Boiling Point:</b> Not available
<b>Odor:</b> Not available	<b>Flashpoint:</b> 116°C
<b>pH:</b> 2.5-4.	<b>Solubility:</b> 209 g/L at 20°C
<b>Vapor Pressure:</b> Not available	<b>Relative Density:</b> Not available
<b>Vapor Density:</b> Not available	<b>Molecular Formula:</b> C <sub>7</sub> H <sub>15</sub> NO <sub>4</sub> S
<b>Viscosity:</b> Not available	<b>Molecular Weight:</b> 209.26 g/mol

### Section 10 - Stability and Reactivity

- 10.1 Chemical Stability:** Stable under normal conditions of use and storage.
- 10.2 Conditions to Avoid:** Excess heat, incompatibles, dust formation.
- 10.3 Incompatibilities with Other Materials:** Strong oxidizers, strong bases.
- 10.4 Hazardous Decomposition Products: Occurs Under Fire**  
**Conditions:** Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Sulphur oxides.
- 10.5 Hazardous Polymerization:** Has not been reported.

### Section 11 - Toxicological Information

- 11.1 Toxicological Effects:**  
**LD50/LC50:** LD50: Oral - rat – >2000 mg/kg.  
**Carcinogenicity:** Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.  
**Epidemiology:** No information available.  
**Teratogenicity:** No information available.  
**Reproductive Effects:** No information available.  
**Neurotoxicity:** No information available.  
**Mutagenicity:** No information available.  
**Specific target organ toxicity -single exposure:** Inhalation -May cause respiratory irritation.  
**Other Studies:** None.  
**Additional Information:**

**RTECS:** QE9104530

To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

### Section 12 - Ecological Information

- 12.1 Ecotoxicity:** Daphnia and other aquatic invertebrates EC50: Daphnia magna (water flea) – 100 mg/L – 48 h.
- 12.2 Persistence and Degradability:** No information available.
- 12.3 Bioaccumulative Potential:** No information available.
- 12.4 Mobility in Soil:** No information available.
- 12.5 Result of PBT and vPvB assessment:** PBT/vPvB assessment not available, chemical safety assessment not required/conducted.
- 12.6 Other Adverse Effects:** No information available.

### Section 13 - Disposal Considerations

- 13.1 Disposal Methods:** Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

Regulations	US DOT	IATA	IMDG
Shipping Name:	Not Dangerous Goods	Not Dangerous Goods	Not Dangerous Goods
Hazard Class:			
UN Number:			
Packing Group:			

### Section 15 - Regulatory Information

#### US FEDERAL

- TSCA:** CAS# 1132-61-2 is listed on the TSCA inventory.
- SARA: 302:** None of the chemicals in this material are subject to reporting requirements of SARA Title III, Section 302.
- 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:** Acute health hazard.

**Massachusetts Right To Know Components:** No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components:**

4-Morpholinopropanesulphonic acid CAS# 1132-61-2

**New Jersey Right To Know Components:**

4-Morpholinopropanesulphonic acid CAS# 1132-61-2

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 16 - Additional Information

### 16.1 Hazard Ratings:

**NFPA Rating:**

Health Hazard: 2

Fire Hazard: 1

Reactivity Hazard: 0

*The information conveyed in this Safety Data Sheet is only a representation of what BioSpectra has found to be accurate based on the current information that is available in regards to this compound. BioSpectra makes no warranty, expressed or implied, with respect to such information, and therefore assumes no liability resulting from product usage. It is strongly recommended that users of this product perform their own investigations to determine the accuracy and suitability of the information for their specific purposes. In no way will BioSpectra assume liability for any claims, losses, damages to any third party, any lost profits or any special, indirect, incidental, consequential or exemplary damages that may arise, even if BioSpectra has been advised of the possibility of such damages.*