

Address: Huangdao District, Qingdao City, Shandong Province, China (formerly Unit 2, Building1, No. 3, Yinshatan Road, Development Zone, Room 1303)

Email: <a href="mailto:hanyu@organic-green.cn">hanyu@organic-green.cn</a> Tel: +86-15610512127

## **Technical Data Sheet (TDS)**

#### 1. Product Overview

Product Name: Boron-Molybdenum Liquid Fertilizer

Model: N/A

Use: This product is a liquid fertilizer designed to supply essential micronutrients boron and molybdenum to plants, promoting healthy growth and crop yield.

Application Fields: Suitable for agricultural crops, horticulture, and soil or foliar fertilization.

## 2. Physical Properties

Property	Value
Color	Golden Yellow
Odor	Mild characteristic odor
Density	1.5 g/cm <sup>3</sup>
Melting Point	Not applicable (liquid product)
Boiling Point	Not applicable (liquid product)

#### 3. Chemical Properties

This product contains the following primary chemical components:

• Boron (B): 120 g/L

• Molybdenum (Mo): 5 g/L

Calcium source: Calcium nitrateChloride (Cl): None detected

• Sodium (Na): None detected

**Molecular Structure & Molecular Weight:** As a liquid fertilizer mixture, no single molecular structure or molecular weight is applicable.

Reactivity: Stable under normal conditions. Avoid contact with strong acids and alkalis.

### 4. Performance Indicators

- High solubility and bioavailability of micronutrients.
- Free from chloride and sodium ions, reducing risk of phytotoxicity.
- Consistent concentration ensuring reliable nutrient supply.

#### 5. Stability

• Product shelf life: 5 years from manufacture date.



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- Store in a cool, dry, and well-ventilated place.
- Protect from direct sunlight and extreme temperatures.
- Keep container tightly closed when not in use.

#### 6. Solubility

Completely soluble in water, forming a homogeneous solution suitable for foliar or soil application. Good dispersibility without precipitation.

## 7. pH Value

pH of 250 times dilution: 7 - 8 (neutral to slightly alkaline).

#### 8. Viscosity

Low viscosity, easy to handle and apply using standard agricultural spraying equipment.

#### 9. Safety Information

- Non-toxic under normal use conditions.
- Non-corrosive to skin and eyes but avoid direct contact.
- Non-flammable and non-explosive.
- Use personal protective equipment when handling large volumes.

## 10. Usage Instructions

- Shake well before use.
- Recommended for foliar spraying or soil drenching according to crop nutrient requirements.
- Do not mix with strongly alkaline or acidic chemicals.
- Store away from food and feed.
- In case of contact with skin or eyes, rinse immediately with plenty of water.
- Keep out of reach of children.





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## **Material Safety Data Sheet (MSDS)**

## 1. Product and Company Identification

Product Name: Boron-Molybdenum Liquid Fertilizer

Batch Number: 20250701

Manufacture Date: July 1, 2025

Analysis Date: July 1, 2025 Expiry Date: July 1, 2030

Manufacturer: Qingdao Bright Honor Biotechnology Co., Ltd.

Address: Huangdao District, Qingdao City, Shandong Province, China (formerly Unit 2, Building

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Contact Person: Hanyu

**Contact Phone:** +86 15610512127

#### 2. Composition / Information on Ingredients

Chemical Name	Concentrati on (g/L)	CAS Number
Boron (B)	120	7440-42-8 (elemental B)
Molybdenum (Mo)	5	7439-98-7 (elemental Mo)
Calcium Nitrate (Ca(NO3)2)	Source of calcium	10124-37-5

#### 3. Hazards Identification

- Emergency Overview: Golden yellow liquid, mild odor. Non-flammable and non-explosive.
- Potential Health Effects:
- o Inhalation: May cause mild irritation to respiratory tract if aerosolized.
- o Skin Contact: May cause mild irritation. Prolonged exposure should be avoided.
- o Eye Contact: May cause mild irritation. Rinse immediately if contact occurs.
- o Ingestion: Low toxicity; ingestion in large quantities may cause gastrointestinal discomfort.
- **Environmental Hazards:** Avoid release into the environment. May be harmful to aquatic life in large quantities.

#### 4. First Aid Measures

- Inhalation: Move person to fresh air. Seek medical attention if symptoms persist.
- Skin Contact: Wash affected area with soap and water. Remove contaminated clothing.
- Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.
- Ingestion: Rinse mouth. Do not induce vomiting. Seek medical advice if large amounts ingested.



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### 5. Fire-Fighting Measures

- Suitable Extinguishing Media: Water spray, foam, dry chemical, or carbon dioxide.
- Unsuitable Extinguishing Media: None known.
- Special Hazards: Non-flammable liquid; no hazardous combustion products expected.
- Protective Equipment for Firefighters: Use self-contained breathing apparatus and protective clothing.

#### 6. Accidental Release Measures

- Wear appropriate personal protective equipment (PPE).
- Contain spill and prevent from entering drains or watercourses.
- Absorb with inert material (e.g., sand, earth) and collect in suitable containers for disposal.
- Clean affected area thoroughly.

## 7. Handling and Storage

- Handle with care, avoid skin and eye contact.
- Store in a cool, dry, well-ventilated area away from incompatible substances.
- Keep container tightly closed when not in use.
- Protect from freezing and direct sunlight.

### 8. Exposure Controls / Personal Protection

- Engineering Controls: Use adequate ventilation to keep airborne concentrations low.
- Personal Protective Equipment (PPE):
- o Gloves resistant to chemicals.
- o Safety goggles or face shield.
- Protective clothing.
- o Respiratory protection if aerosol or mist is generated.

### 9. Physical and Chemical Properties

Appearance	Golden yellow liquid	
Odor	Mild characteristic odor	
pH (250x dilution)	7 - 8	
Density	1.5 g/cm <sup>3</sup>	
<b>Boiling Point</b>	Not applicable (liquid solution)	
<b>Melting Point</b>	Not applicable (liquid solution)	
Solubility	Completely soluble in water	



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#### 10. Stability and Reactivity

- Stable under recommended storage conditions.
- Avoid contact with strong acids and alkalis.
- No hazardous decomposition products known.

## 11. Toxicological Information

- Low toxicity based on available data.
- Not classified as carcinogenic, mutagenic, or toxic to reproduction.
- May cause mild irritation on prolonged or repeated exposure.

## 12. Ecological Information

- May be harmful to aquatic organisms if released in large quantities.
- Avoid contamination of soil and water bodies.

#### 13. Disposal Considerations

- Dispose of in accordance with local, regional, and national regulations.
- Do not dispose into drains or environment.
- Use licensed waste disposal contractors.

## 14. Transport Information

- Not classified as hazardous for transport.
- Follow general precautions for liquid fertilizers during transport.

### 15. Regulatory Information

• Complies with relevant agricultural and chemical safety regulations.

#### 16. Other Information

Prepared by: Qingdao Bright Honor Biotechnology Co., Ltd.

Date of Preparation: July 1, 2025 Contact: Hanyu, +86 15610512127

This MSDS is provided based on current knowledge and is intended to describe the product for safety purposes. Users should ensure suitability for their specific applications.



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## **Certificate of Analysis (COA)**

#### 1. Product Information

Product Name: Boron-Molybdenum Liquid Fertilizer

Batch Number: 20250701

Manufacture Date: July 1, 2025

Analysis Date: July 1, 2025 Expiry Date: July 1, 2030

#### 2. Manufacturer Information

Manufacturer: Qingdao Bright Honor Biotechnology Co., Ltd.

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Contact Person: Hanyu

**Contact Phone:** +86 15610512127

### 3. Analytical Results

Parameter	Specification	Test Result	Unit
Boron (B)	≥ 120	120	g/L
Molybdenum (Mo)	≥ 5	5	g/L
Chloride (Cl)	None Detected	Not Detected	
Sodium (Na)	None Detected	Not Detected	
Calcium Source	Calcium Nitrate	Confirmed	
Color	Golden Yellow	Golden Yellow	
pH (250x dilution)	7 - 8	7.5	
Density	$1.5 \pm 0.05$	1.5	g/cm <sup>3</sup>

## 4. Remarks

The product conforms to the specified quality standards and is suitable for agricultural use as a liquid fertilizer supplying boron and molybdenum micronutrients.

### 5. Approval

Approved by Quality Control Department





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Email: \_\_\_\_\_\_ @organic-green.cn Tel: +86-15610512127

Signature:

**Date:** July 1, 2025