



# CHEMICAL & FERTILIZER, LLC

## Safety Data Sheet

### Section 1 – Chemical Product and Company Identification

**Product Name:** BIOX®  
**Chemical Name:** Not applicable  
**Common Name, Synonym:** Not applicable  
**Material Uses:** Ammonia Reduction Formula (Liquid)  
**Manufacturer/Manufactured For:** Miller Chemical and Fertilizer, LLC  
Phone: (717) 632-8921 FAX: (717) 646-1104 CHEMTREC: (800) 424-9300

### Section 2 – Hazard Identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification (29 CFR 1910.1200)

Not a hazardous substance or mixture according to 29 CFR 1910.1200 (OSHA HCS)

#### 2.2 Label elements

##### GHS Labeling Elements

Pictogram: Not Applicable  
Signal Word: Not applicable

Hazard Statements: Not applicable  
Precautionary Statements: Not Applicable

### Section 3 – Composition/Information of Ingredients

Ingredient Name	CAS Number	%
The proprietary ingredients in BIOX® are non-hazardous		

The above chemicals are not present in sufficient quantities to classify the mixture as hazardous according to GHS bridging principles.

PA Right to Know: This product contains proprietary ingredients

This product contains the following chemicals subject to the reporting requirements of Section 13 Title III of the Superfund Amendments and Reauthorization act of 1986 and 40 CFR part 372 ( the corresponding CAS numbers and typical percent by weight are also provided).

None



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#### Section 4 – First Aid Measures

##### EYE CONTACT

Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids apart to ensure flushing of entire surface. Call a physician.

##### SKIN CONTACT

Immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse. Call a physician.

##### INHALATION

Remove to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. If breathing is difficult give oxygen. Call a physician.

##### INGESTION

If swallowed, DO NOT induce vomiting. Rinse mouth with water. Dilute stomach contents by drinking water. If vomiting occurs spontaneously, keep head below hips to prevent breathing vomit into lungs. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Call a physician immediately!

#### Section 5 – Fire-Fighting Measures

<b>Flash Point (METHOD):</b>	Not Applicable
<b>Auto-Ignition:</b>	Not Available
<b>Flammable Limits:</b>	Not Available
<b>Extinguishing Media:</b>	Non-flammable. If involved in fire, use water.
<b>Special Fire Fighting Procedures:</b>	None currently known.
<b>Unusual Fire and Explosion Hazards:</b>	None currently known.

#### Section 6 – Accidental Release Measures

##### Personal precautions

Evacuate non-essential personnel, eliminate ignition sources, and wear protective equipment (See Section VIII). Shut off source of leak only if safe to do so. Wear respiratory equipment if exposure limits are exceeded.

##### Contain spill

Recover free product. To clean up residue, flush sparingly with water or use an absorbent. Avoid runoff to ground water, surface waters, and sewers. It may be necessary to remove contaminated soil. If product is flammable or combustible, use non-sparking tools. If acidity (low pH) is a problem, neutralize with hydrated lime, soda ash, or sodium bicarbonate. If alkalinity (high pH) is a problem neutralize with dilute acetic acid or dilute hydrochloric (muriatic) acid. If required, notify state and local authorities.



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### Section 6 – Accidental Release Measures *continued*

#### Disposal Method

Solids must be disposed of in a permitted waste management facility. Recovered liquids may be reprocessed or incinerated. Incineration must be handled in a permitted facility. Dispose of material in accordance with all Federal, State and Local regulations. Local regulations may be more stringent than Federal or State.

### Section 7 – Handling and Storage

**Handling:** Wear protective equipment when handling. Wash thoroughly after handling. Do not get in eyes. Do not breathe vapor, mist, or dust. Avoid prolonged or repeated contact with skin. Do not swallow.

**Storage:** For industrial use only. Keep container closed when not in use. Store in a cool dry place. Keep out of reach of children.

### Section 8 – Exposure Controls/Personal Protection

Engineering Controls:

Mechanical: General ventilation is usually adequate.

**Respiratory Protection:** If exposure limits are exceeded, or if exposure may occur, use a NIOSHA/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSHA publications concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in compliance with OSHA requirements in 29 CFR 1910.134. For emergencies, a NIOSHA/MSHA approved positive pressure-breathing apparatus should be readily available.

**Eye Protection:** Chemical goggles or face shield. Always wear eye protection when working with chemicals. Never wear contact lenses when working with chemicals.

**Skin Protection:** Rubber gloves. Clean protective body covering, rubber apron, and rubber boots.

**Work Hygienic Practices:** Avoid contact with skin, eyes, and clothing. After handling this product, wash hands before eating, drinking or smoking. If contact occurs, remove contaminated clothing. If needed, take First Aid action shown in Section IV. Launder contaminated clothing before use.

**Other Protective Equipment:** Safety shower, eye wash fountain, and washing facilities should be readily available.



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### Section 9 – Physical and Chemical Properties

<b>Appearance:</b>	Light brown liquid
<b>Odor:</b>	Moderate odor
<b>pH (aqueous approx. 5% in DW):</b>	6.8 to 7.8
<b>Boiling point/Boiling range:</b>	≥ 212°F (100°C)
<b>Freeze Point:</b>	< 32°F (0°C)
<b>Flash Point:</b>	No Determined
<b>Vapor Pressure (mmHg):</b>	Not Determined
<b>Vapor Density (Air=1):</b>	Not Determined
<b>Solubility in Water:</b>	Soluble
<b>Specific Gravity (H<sub>2</sub>O=1 @ 4°C):</b>	1.12 – 1.16 g/mL @ 68°F (20°C)
<b>Evaporation Rate (NA=1):</b>	Not Determined
<b>Percent Volatile by Volume:</b>	Not Determined

### Section 10 – Stability and Reactivity

<b>Chemical Stability:</b>	Stable
<b>Materials to Avoid:</b>	Strong Oxidizing Agents
<b>Hazardous Decomposition or Byproducts:</b>	Oxides of phosphorus
<b>Hazardous Polymerization:</b>	Will not occur

### Section 11- Toxicological Information

#### Toxicity Data:

<b>Acute Eye Irritation:</b> Data not available	<b>Skin Sensitization:</b> Data not available
<b>Acute Dermal Effects:</b> Data not available	<b>Acute Dermal Irritation:</b> Data not available
<b>Acute Oral Effects:</b> Data not available	<b>Mutagenicity:</b> Data not available
<b>Acute Inhalation Effects:</b> Data not available	<b>Teratogenicity:</b> Data not available

### Section 12 – Ecological Information

**Ecotoxicity:** Data not available  
**Aquatic Toxicity:** Data not available  
**Environmental Fate:** Data not available



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### Section 13 – Disposal Considerations

<b>Disposal:</b>	If uncontaminated, recover and reuse as product. If contaminated with other materials, the nature and extent of contamination may require use of specialized disposal methods. Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations
<b>Disposal Regulatory Requirements:</b>	Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations
<b>Container Cleaning and Disposal:</b>	Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations

### Section 14 – Transport Information

#### U.S. DEPARTMENT OF TRANSPORTATION

**PROPER SHIPPING NAME:**  
**PACKING GROUP:**  
**HAZARD CLASS:**  
**LABEL/PLACARD REQUIRED:**  
**UN/NA No.:**

#### WATER TRANSPORTATION

**PROPER SHIPPING NAME:**  
**PACKING GROUP:**  
**HAZARD CLASS:**  
**LABEL/PLACARD REQUIRED:**  
**UN/NA No.:**

#### AIR TRANSPORTATION

**PROPER SHIPPING NAME:**  
**PACKING GROUP:**  
**HAZARD CLASS:**  
**LABEL/PLACARD REQUIRED:**  
**UN/NA No.:**

#### OTHER AGENCIES:

**SECTION 14 NOTES:** This product is not considered a hazard



Product Name: BIOX®

**Section 15 – Regulatory Information**

**EPA Regulations:**

**Reportable Quantity –CERCLA: Not applicable**

**SARA Title III (EPCRA): Not applicable**

**RCRA Waste Code: Not applicable**

**State Regulations:**

**CA Proposition 65: Not applicable**

**EPA National Response Center (800) 424-8802**

**Section 16 – Other Information**

**Preparation Date:** 04/10/2015

**Prepared By:** Miller Chemical Regulatory Compliance Officer

**Revision Date:**

**Revision Notes:** GHS Compliance

**NOTICE TO READER:** THE INFORMATION CONTAINED IN THIS SAFETY DATA SHEET (“SDS”) RELATES ONLY TO THE SPECIFIC PRODUCT(S) DESIGNATED HEREIN (THE “PRODUCT”). THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CURRENT AND CORRECT AS OF THE DATE OF THIS SDS, AND OBTAINED FROM SOURCES THAT ARE BELIEVED TO BE RELIABLE. HOWEVER, THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, REPRESENTATIONS OR LICENSE OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO ACCURACY, CORRECTNESS, OR COMPLETENESS, AND NEITHER MILLER CHEMICAL AND FERTILIZER, LLC. NOR ITS MARKETING AFFILIATES (EACH, A “SELLER”) ASSUME ANY LEGAL RESPONSIBILITY FOR THE USE OR RELIANCE UPON SAME.