



# Safety Data Sheet

Issue Date 01-Jun-2006

Revision Date: 10-Oct-2013

Version 1

## 1. IDENTIFICATION

**Product Identifier**

**Product Name** CNI NITRO-BOR 5%N, 3.5%B

**Other means of identification**

**SDS #** CNI-022

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Plant Nutrients.

**Details of the supplier of the safety data sheet**

**Supplier Address**

CNI AgriMinerals  
P.O. Box 3706  
Albany, GA 31706

**Emergency Telephone Number**

**Company Phone Number** 1-229-883-5538 (Business)

1-229-439-0842 (fax)

**Emergency Telephone (24 hr)** Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear liquid

**Physical State** Liquid

**Odor** Odorless

**Classification**

Acute toxicity - Inhalation (Vapors)	Category 3
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1B

**Signal Word**

**Danger**

**Hazard Statements**

Toxic if inhaled  
 May cause cancer  
 May damage fertility or the unborn child

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Common Name** Nitrogen & Micronutrient Fertilizer Solution.

Chemical Name	CAS No	Weight-%
A proprietary blend of Primary Plant Nutrients (N) & Micronutrients in an aqueous solution	Proprietary	>99
Nitrogen (as derived from Urea)	Proprietary	5 (Included in above blend)
Boron (as derived from Boric Acid)	Proprietary	3.5 (Included in above blend)

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	If exposed or concerned: Get medical advice/attention.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water. If irritation persists, seek medical attention.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
<b>Ingestion</b>	If conscious, give large amounts of milk or water and get medical attention. If prompt medical attention is not available, call your local Poison Control Center.

**Most important symptoms and effects****Symptoms**

Direct contact with eyes may cause irritation or damage. Contact with skin may cause irritation. May cause respiratory irritation. Ingestion may cause irritation of the gastrointestinal tract, cramps, vomiting or diarrhea. Ingestion may cause sore throat, abdominal pain, nausea, and severe burns of the mouth, throat, and stomach. Severe exposures can lead to shock, circulatory collapse, and death.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Treat symptomatically. Exposure may aggravate medical conditions such as asthma, lung disease, and skin disorders. Chronic ingestion may cause damage to heart, liver, and blood-forming tissues. Ingestion of large quantities may cause headache, mental impairment, dizziness, and may be fatal.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not release runoff from fire control methods to sewers or waterways.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

None known.

**Hazardous Combustion Products** Nitrogen oxides (NOx). Ammonia. Cyanuric acid. Volatile organic compounds.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Use personal protection recommended in Section 8.

**For Emergency Responders**

Follow applicable OSHA regulations (29 CFR 1910.120).

**Environmental Precautions**

Prevent runoff to sewers, streams, and other bodies of water. See Section 12 for additional Ecological Information. See Section 13, Disposal Considerations, for additional information.

**Methods and material for containment and cleaning up****Methods for Containment**

Prevent further leakage or spillage if safe to do so. For large spills, dike far ahead of spill for later disposal.

**Methods for Clean-Up**

For small spills, absorb with sand, clay, or other inert absorbent. For large spills contained material may be salvaged for use if uncontaminated.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on Safe Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Use in accordance with product label instructions. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

### Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Store in closed, properly labeled containers in a cool, ventilated area. Store in compatible containers. Keep away from children, pets, domestic animals, and wildlife. Product may be corrosive to aluminum, mild steel and brass. Store in HDPE, fiberglass or stainless steel containers. Use only stainless steel, PVC or polypropylene fittings. Store locked up.

#### **Packaging Materials**

Do not reuse container. Empty containers should be triple rinsed and use the rinsate in product tank. See Section 13, Disposal Considerations, for additional information.

#### **Incompatible Materials**

None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Boron (as derived from Boric Acid)	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> inhalable fraction	-	-

### Appropriate engineering controls

#### **Engineering Controls**

Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

### Individual protection measures, such as personal protective equipment

#### **Eye/Face Protection**

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

#### **Skin and Body Protection**

Wear chemically protective gloves to prevent skin contact. Wear protective clothing. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

#### **Respiratory Protection**

Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. **WARNING!** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Odorless
<b>Appearance</b>	Clear liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Clear		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not available	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	Not available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-not applicable	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	1.135-1.145	(1=Water)
Water Solubility	Fully miscible	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
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### Conditions to Avoid

Keep out of reach of children. Avoid evaporating to dryness.

### Incompatible Materials

None known based on information supplied.

### Hazardous Decomposition Products

Volatile organic compounds. Nitrogen oxides (NOx). Ammonia. Cyanuric acid.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Toxic if inhaled.
<b>Ingestion</b>	Do not taste or swallow.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nitrogen (as derived from Urea)	= 8471 mg/kg ( Rat )	-	-
Boron (as derived from Boric Acid)	= 2660 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 0.16 mg/L ( Rat ) 4 h

### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Exposure may aggravate pre-existing respiratory or skin problems.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested. May cause cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Boron (as derived from Boric Acid)		Group 2A		X

*IARC (International Agency for Research on Cancer)*

*Group 2A - Probably Carcinogenic to Humans*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

**Reproductive toxicity** May damage fertility or the unborn child.

**Target organ effects** Chronic ingestion may cause damage to heart, liver, and blood-forming tissues. Ingestion of large quantities may cause headache, mental impairment, dizziness, and may be fatal.

### Numerical measures of toxicity

Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

This product may be moderately toxic to aquatic life and may cause eutrophication.

### Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Nitrogen (as derived from Urea)		16200 - 18300: 96 h Poecilia reticulata mg/L LC50		10000: 24 h Daphnia magna Straus mg/L EC50 3910: 48 h Daphnia magna mg/L EC50 Static
Boron (as derived from Boric Acid)		1020: 72 h Carassius auratus mg/L LC50 flow-through		115 - 153: 48 h Daphnia magna mg/L EC50

### Persistence/Degradability

Not determined

### Bioaccumulation

Not determined

### Mobility

Chemical Name	Partition Coefficient
Nitrogen (as derived from Urea)	-1.59
Boron (as derived from Boric Acid)	-0.757

### Other Adverse Effects

Not determined

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

#### **Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your supplier or a licensed contractor for detailed recommendations.

#### **Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your supplier or a licensed contractor for detailed recommendations.

### California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Boron (as derived from Boric Acid)	Toxic

## 14. TRANSPORT INFORMATION

<b><u>Note</u></b>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<b><u>DOT</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated
<b><u>IMDG</u></b>	Not regulated

## 15. REGULATORY INFORMATION

### **International Inventories**

Not determined

#### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

### **US Federal Regulations**

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

#### **SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

### **US State Regulations**

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### **U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations



**16. OTHER INFORMATION****NFPA****Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

**HMIS****Health Hazards****Flammability****Physical Hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

**Issue Date**

01-Jun-2006

**Revision Date:**

10-Oct-2013

**Revision Note**

New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**