

# TIM-BOR<sup>®</sup> PROFESSIONAL

**Works as a dust, liquid or foam.**

PROVIDES LONG-LASTING PROTECTION.



Tim-bor Professional, one of America's most popular pest control products, eliminates wood destroying organisms and offers long-lasting protection with great application flexibility. Its active ingredient has no known resistance.



Tim-bor Professional's active ingredient is a natural borate mineral salt that diffuses into wood and will not break down over time like most organic compounds.

- Kills and controls drywood & subterranean termites, decay fungi, wood boring beetles and carpenter ants.
- The active ingredient is 98% disodium octaborate tetrahydrate, and when mixed with water provides for a 10% or 15% solution.
- Use as a dust, liquid or foam for interior or exterior use.
- The mixed solution is topically applied to bare wood or injected.
  - Apply as a liquid onto wood in crawl spaces of structures for the prevention and control of wood decay and wood destroying insects.
  - Excellent preventative for drywood termites when applied to wood in new construction or in existing structures fungus.
- Can be used as a dust for carpenter ant control.
- Can be used in conjunction with fumigation for residual protection.
- Highly effective, economical and virtually odorless.

Visit [www.nisuscorp.com](http://www.nisuscorp.com) for the complete line of pest products.

100 Nisus Drive ■ Rockford, TN 37853 ■ (800) 264-0870 ■ [www.nisuscorp.com](http://www.nisuscorp.com)



*Smart Pest Control Solutions*

# Tim-bor<sup>®</sup> Professional<sup>®</sup>

## INSECTICIDE AND FUNGICIDE

A preservative for protection and treatment of wood against fungal decay and wood destroying insects including termites.

For the prevention and remedial control of wood\*\* infesting organisms including: Termites, Drywood Termites, Wood Destroying Beetles Decay Fungi and Carpenter Ants

\*\*Also for Wood Foam Composite Structural Components

### Active Ingredient:

Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)..... 98%  
 Other Ingredient+ ..... 2%  
 Total..... 100%

EPA Reg. No. 64405-8 EPA Est. 64405-TN-1

+Contains 2% H<sub>2</sub>O – Absorbed Moisture

**Keep Out of Reach of Children**  
**CAUTION**

### FIRST AID

<b>If Swallowed</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If Inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If In Eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for further treatment advice</li> </ul>

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

### PRECAUTIONARY STATEMENTS

#### Hazards To Humans & Domestic Animals

**CAUTION:** Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing dust. Thoroughly wash with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are barrier laminate; butyl, nitrile, neoprene and natural rubbers ≥ 14 mils; polyethylene; polyvinyl chloride; and viton ≥ 14 mils. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Applicators, mixers and other handlers must wear long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves and protective eyewear. When applying this product in confined spaces, provide ventilation or an exhaust system; or use a NIOSH-approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-23C); or use a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G) or a NIOSH-approved respirator with any N,R, P or HE prefilter.

#### User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet;
- Remove clothing immediately if pesticide gets inside, then wash thoroughly and put on clean clothing;

### User Safety Recommendations (cont.)

- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### Environmental Hazards

This pesticide is toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

### NOTICE

Read and understand the entire label before using.

Use only according to label directions.

Before buying or using this product, read the **Warranty Disclaimer** and **Limitation of Remedies** statements found elsewhere on this label. If terms are unacceptable, return unopened package to seller for full refund of purchase price. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under **Warranty Disclaimer** and **Limitation of Remedies**.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

### General Information

**TIM-BOR Professional** is a water soluble, inorganic borate salt with insecticidal and fungicidal properties effective against wood-destroying organisms including the target pests listed below. Apply **TIM-BOR Professional** as a liquid solution, powder or foam. **TIM-BOR Professional** is an effective treatment for wood (and wood-foam composite structural components) to kill and prevent infestations of decay fungi including white rot, brown rot (i.e., *Poria*) and wet rots. This product may be used for preventative treatment (before signs of infestation), for wood in existing structures and for remedial treatment of infested wood in existing structures. **TIM-BOR Professional** is also effective for the prevention and control of wood destroying insects such as, but not limited to, the following organisms: **Subterranean Termites** (*Reticulitermes*, *Heterotermes*, *Coptotermes* (Formosan)), **Drywood Termites** (*Kaloterms*, *Incisitermes*), **Dampwood Termites** (*Zootermopsis*), **Powderpost Beetles** (*Lyctidae*), **"False" Powderpost Beetles** (*Bostrichidae*), **Deathwatch** and **Furniture Beetles** (*Anobiidae*), **Old House Borers**, **Longhorn Beetles** (*Cerambycidae*), **Carpenter Ants** (*Camponotus*), **Bark and Timber Beetles** (*Scolytidae*).

**TIM-BOR Professional** is recommended for wood and cellulose material in accordance with the specific treatment methods described herein. **TIM-BOR Professional** is effective for all interior and exterior wood (and wood-foam composite structural components) that will be protected from excessive rain and not in direct contact with the soil. Types of wood include, but are not limited to, all types of lumber, logs and plywood. This product kills wood-destroying organisms. Some etching of treated wood may occur from organisms before they die. Do not apply **TIM-BOR Professional** to wood or cellulose material that has been painted, varnished or sealed. For best results, apply **TIM-BOR Professional** to bare wood. Use soap and water to clean application equipment.

**Note:** Spraying water on some wood species can mobilize natural wood extractives, raise the grain and leave behind calcium or other deposits. Prior to treating large areas, treat a small area with **TIM-BOR Professional** solution to ensure that you are satisfied with the final aesthetics.

## Preparation of Treatment Solutions

**10% TIM-BOR Professional Liquid Solution:** To prepare solution, add approximately 80% of the required volume of water to the mixing vessel. While stirring, gradually add 1.0 pound of **TIM-BOR Professional** for each gallon of treating solution required. Add remaining water to the solution and stir until the entire product has dissolved.

**15% TIM-BOR Professional Liquid Solution:** Prepare solution as above, but gradually add 1.5 pounds of **TIM-BOR Professional** for each gallon of treatment solution needed. Use this solution as soon as possible and do not store for an extended length of time.

**15% TIM-BOR Professional Foam:** Prepare a 15% liquid solution as described above and also add a surfactant-foaming agent. Generally 1-2 ounces of a foaming agent, added to the 15% liquid solution, produces a dry foam with the desired expansion ratio of approximately 20 to 1 (20 gallons of foam per 1 gallon of liquid solution). The **TIM-BOR Professional** foam should be of a "dry" consistency that adheres to wood surfaces so that run-off is minimized. A "wet" foam may damage wallboard or other building components. Refer to the individual foam equipment manufacturer's manual and the surfactant's label for specific instructions.

Wash and rinse all equipment after each use.

## General Application Instructions

**TIM-BOR Professional as a liquid solution:** **TIM-BOR Professional** liquid applications may be made to wood structures including decks, fences, steps, sheds, barns and other outbuildings. Such structures must be protected from excess rain. On wood with drier than normal moisture content, apply by brush or spray two applications of a 10% solution to wood surfaces. On wood with normal moisture content, apply by brush or spray one application of a 15% solution to wood surfaces. Application may also be made by drilling and then injecting the solution under pressure into sound wood or into the insect galleries of infested wood. **TIM-BOR Professional** may be applied as a foam to wood surfaces or injected into wall voids or insect galleries.

## Remedial and Preventative Treatment

**TIM-BOR Professional Solutions for the Control of Wood Destroying Organisms and to Kill Active Infestations of Termites, Powderpost Beetles and Wood Decay Fungi:** For remedial control of wood attacking organisms or for the protection of wood against future infestations, two applications of a 10% liquid solution are required. One application of a 15% liquid solution may be used. Apply **TIM-BOR Professional** solutions by brush or spray at the rate of 5 gallons of liquid solution per 1000 square feet of wood surface area. Thoroughly wet wood surface area. Application may also be made by drilling and then injecting the liquid solution under pressure into sound wood or until run-off is observed coming from entry/exit holes of infested wood.

**TIM-BOR Professional Powder to Kill and Control Wood Destroying Organisms, Such as Termites and Carpenter Ants:** Apply **TIM-BOR Professional** as is to wood members by drilling and injecting the powder into galleries or by dusting generously on wood surfaces. **TIM-BOR Professional** powder can also be injected or dusted into wall voids such as between studs, block voids, box sills, eaves, attics, soffits, etc. Apply **TIM-BOR Professional** powder to these areas at the rate of 0.5 ounce (12-14 grams) per square foot.

**TIM-BOR Professional Foam:** In wall voids, inject enough dry foam to contact wood surfaces of studs in the wall or the entire desired target area. Apply foam, where possible, to abutting wood surfaces and between wood joints. Apply the foam so that all accessible wood surfaces are covered with foam. **TIM-BOR Professional** foam can also be injected into insect galleries until run-off is observed.

## Storage and Disposal

*(1.5 lb bag • 250 lb. drum • 1500 lb. super sack)*

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store in a dry place. Do not store where children or animals may gain access. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Disposal:** Non-refillable container; do not reuse or refill this container. Triple rinse (or equivalent) container then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration.

## Storage and Disposal

*(25 lb. bucket)*

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store in a dry place. Do not store where children or animals may gain access. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Disposal:** Refillable Container; refill this container with only Disodium Octaborate Tetrahydrate. Do not reuse this container for any other purpose. Cleaning the container before refilling is the responsibility of the refiller. Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with a pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times, then offer container for recycling, if available; or reconditioning, if appropriate; or dispose of container in a sanitary landfill.

## Warranty Disclaimer

Manufacturer warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. **MANUFACTURER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

## Inherent Risks of Use

The directions for use of this product are believed to be adequate and must be carefully followed. It is impossible to eliminate all risks associated with use of this product. Lack of performance or other unintended consequences may result because of such factors as use of the product contrary to label instructions, abnormal conditions, the presence of other materials, climatic conditions or the manner of application, all of which are beyond the control of the Manufacturer. The buyer/user assumes all such risks.

## Limitation of Remedies

To the extent not prohibited by applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability or other legal theories) shall be limited to, at Manufacturer's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

To the extent not prohibited by applicable law: a) Manufacturer shall not be liable for losses or damages resulting from handling or use of this product unless Manufacturer is promptly notified of such loss or damage in writing; and b) **IN NO CASE SHALL MANUFACTURER BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OR LOSSES, INCLUDING WITHOUT LIMIT, HEALTH RELATED DAMAGES OR INJURIES.** The terms of this **Warranty Disclaimer** and **Limitation of Remedies** cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Manufacturer or the seller is authorized to vary or exceed the terms of this **Warranty Disclaimer** or **Limitation of Remedies** in any manner.



# SAFETY DATA SHEET

## Tim-bor® Professional

Health Emergencies: CHEMTREC® (800) 424-9300

### 1. PRODUCT AND COMPANY INFORMATION

**Product Identity:** Tim-Bor Professional®

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

Termiticide, Insecticide, and Fungicide Concentrate Powder. Read and understand the entire label before using. Use only according to label directions. It is a violation of Federal law to use this product in a manner inconsistent to label directions.

**Manufacturer:** Nisus Corporation  
100 Nisus Drive  
Rockford, TN 37853

**Telephone:** Phone: (800) 264-0870  
Fax: (865) 577-5825

**Emergency Phone:** 800-424-9300 (CHEMTREC)

**SDS Date of Preparation:** 5/29/15

### 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Health

Reproductive Toxicity Category 2

**GHS Label Elements:**



**Signal Word:** Warning!

**Statements of Hazard**

H303: May be harmful if swallowed.

H361: Suspected of damaging fertility or the unborn child.

**Precautionary Statements**

P202: Do not handle until all safety precautions have been read and understood.

P308+P313: If exposed or concerned: Get medical advice/attention.

P501: Dispose of contents/container in accordance with local regulation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Disodium Octaborate Tetrahydrate	12280-03-4	>98%

### 4. FIRST AID MEASURES

**Description of necessary first aid measures:**

Protection of first-aiders: No special protective clothing is required.

**Inhalation:** If symptoms such as nose or throat irritation are observed, remove to fresh air.

**Eye contact:** Use eye wash fountain or fresh water to cleanse eye. If irritation persists for more than 30 minutes, seek medical attention.

**Skin contact:** No treatment necessary.

**Ingestion:** Swallowing small quantities (one teaspoon) will cause no harm to healthy adults. If larger amounts are swallowed, give two glasses of water to drink and seek medical attention.

**Most important symptoms and effects both acute and delayed:**

Symptoms of accidental over-exposure to high doses of inorganic borate salts have been associated with ingestion or absorption through large areas of severely damaged skin. These may include nausea, vomiting, and diarrhoea, with delayed effects of skin redness and peeling (see Section 11).

**Indication of any immediate medical attention and special treatment needed:** Note to physicians: Supportive care only is required for adult ingestion of less than a few grams of the product. For

ingestion of larger amounts, maintain fluid and electrolyte balance and maintain adequate kidney function. Gastric lavage is only recommended for heavily exposed, symptomatic patients in whom emesis has not emptied the stomach. Hemodialysis should be reserved for patients with massive acute absorption, especially for patients with compromised renal function. Boron analyses of urine or blood are only useful for verifying exposure and are not useful for evaluating severity of poisoning or as a guide in treatment.

### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:** Use extinguishing media that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** None

**Special hazards arising from the chemical**

None. The product is not flammable, combustible or explosive.

**Special protective equipment and precautions for fire fighters:** Not applicable. The product is itself a flame retardant.

### 6. ACCIDENTAL RELEASE MEASURES

**Precaution, protective equipment and emergency procedures**

**For non-emergency personnel:**

Eye goggles and gloves are not required for normal industrial exposures, but eye protection according to ANSI Z.87.1 or other national standard. Respirators should be considered if environment is excessively dusty.

**For emergency responders:**

Eye goggles and gloves are not required for normal industrial exposures, but eye protection according to ANSI Z.87.1 or other national standard. Respirators should be considered if environment is excessively dusty.

**Environmental precautions:** The product is a water-soluble white powder that may cause damage to trees or vegetation by root absorption. Avoid contamination of water bodies during clean up and disposal. Advise local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns the boron value to its normal environmental background level or meets local water quality standards.

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

**Appropriate containment:** Avoid spillage into water and cover drains.

**Land spill:** Vacuum, shovel or sweep up and place in containers for disposal in accordance with applicable local regulations.

**Spillage into water:** Where possible, remove any intact containers from the water.

**Reference to other sections**

Refer to sections 8, 12 and 13.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

Good housekeeping procedures should be followed to minimize dust generation and accumulation. Avoid spills.

Do not eat, drink and smoke in work areas. Wash hands after use.

Remove contaminated clothing and protective equipment before entering eating areas.

Nonrefillable container. Do not reuse containers. Product residues in empty containers can be hazardous. Follow all SDS precautions when handling empty containers.

**Conditions for safe storage, including any incompatibilities**

No special handling precautions are required, but dry, indoor storage is recommended. To maintain package integrity and to minimize caking of the product, bags should be handled on a first-in first-out basis.

**Storage temperature:** Ambient

**Storage pressure:** Atmospheric

**Special sensitivity:** Moisture (Caking)

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters:

**Occupational exposure limit values:** In the absence of a national OEL, Rio Tinto Borax recommends and applies internally an Occupational Exposure Limit (OEL) of 1 mg B/m<sup>3</sup>. To convert product into equivalent boron (B) content, multiply by 0.21.

### Occupational Exposure Limits:

OSHA/PEL (total dust)	15 mg/m <sup>3</sup>	Particulate Not Otherwise Classified or Nuisance Dust
OSHA/PEL (respirable dust)	5 mg/m <sup>3</sup>	Particulate Not Otherwise Classified or Nuisance Dust
Cal OSHA/PEL	5 mg/m <sup>3</sup>	Particulate Not Otherwise Classified or Nuisance Dust

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties:

**Appearance:** White, crystalline solid

**Odor:** Odorless

**Odor threshold:** Not applicable

**pH @ 20°C:** 8.3 (3.0% solution); 7.6 (10.0% solution)

**Melting point/ Freezing point:** 815°C

**Initial boiling point and boiling range:** Not applicable.

## 10. STABILITY AND REACTIVITY

**Reactivity:** None known.

**Chemical Stability:** Under normal ambient temperatures (-40°C to +40°C), the product is stable.

**Possibility of Hazardous Reactions:** Reaction with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas which could create an explosive hazard.

**Conditions to Avoid:** Avoid contact with strong reducing agents by storing according to good industrial practice.

**Incompatible Materials:** Strong reducing agents.

**Hazardous Decomposition Products:** None

## 11. TOXICOLOGICAL INFORMATION

**Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):**

### (a) Acute toxicity

Acute Oral Toxicity Study – OECD Guidelines 401

Low acute oral toxicity. LD<sub>50</sub> in male rats is 2,550 mg/kg.

Classification: Acute Toxicity (Oral) Category 5 (Hazard statement: H303: May be harmful if swallowed)

Acute Dermal Toxicity Study – similar to OECD Guideline 402

Low acute dermal toxicity; LD<sub>50</sub> in rabbits is > 2,000 mg/kg.

Acute Inhalation Toxicity Study – OECD Guideline 403

Low acute inhalation toxicity. LC<sub>50</sub> in rats is > 2.0 mg/l (or g/m<sup>3</sup>).

### (b) Skin corrosion / irritation:

No skin irritation in rabbits. Mean Primary Irritation Score: 0.5. Based on the available data for the hydrated forms of sodium tetraborate, the classification criteria are not met.

### (c) Serious eye damage / irritation:

Eye Irritation Study – similar to OECD Guideline 405

Results: Not irritating to eyes. Induced slight iritis, conjunctivae redness and chemosis, reversible after 4-7 days with a return to near normal by 7 days after exposure.

Classification: Based on mean scores of ≤ 1, and the effects were fully reversible within 7 days, the classification criteria are not met.

### (d) Respiratory or skin sensitization:

Buehler Test – OECD Guideline 406

Not a skin sensitizer. No respiratory sensitization studies have been conducted. There are no data to suggest that boric acid or sodium borates are respiratory sensitizers. Based on the available data, the classification criteria are not met.

### (e) Germ cell mutagenicity:

Not mutagenic (based on boric acid). Based on the available data, the classification criteria are not met.

### (f) Carcinogenicity:

Method: OECD 451 equivalent.

No evidence of carcinogenicity (based on boric acid). Based on the available data, the classification criteria are not met.

### (g) Reproductive toxicity:

Method: Three-generation feeding study, similar to OECD 416 Two-Generation Study

NOAEL in rats for effects on fertility in males is 100 mg boric acid/kg bw equivalent to 17.5 mg B/kg bw.

Prenatal Developmental Toxicity Study of Boric Acid - OECD Guideline 414

Routes of Exposure: Oral feeding study

NOAEL in rats for developmental effects on the fetus including fetal weight loss and minor skeletal variations is 55 mg boric acid/kg.

Reproductive Toxicity Category 2 (Hazard statement: H361:

Suspected of damaging fertility or the unborn child.)

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity (aquatic and terrestrial, where available):

Note that the data values are expressed as boron equivalents. To convert to this product divide the boron equivalent by 0.21.

### Freshwater—Chronic Studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric NOEC/EC <sub>10</sub> )
Algal	4	10 mg B/L ( <i>Chlorella pyrenoidosa</i> ) to 50 mg B/L ( <i>Anacystis nidulans</i> )
Higher plants	3	4.0 mg B/L ( <i>Phragmites australis</i> ) to 60 mg B/L ( <i>Lemna minor</i> )
Invertebrate and protozoan	7	5.7 mg B/L ( <i>Daphnia magna</i> ) to 32 mg B/L ( <i>Chironomus riparius</i> )
Fish	6	2.9 mg B/L ( <i>Micropterus salmoides</i> ) to 17 mg B/L ( <i>Carassius auratus</i> )
Amphibian	2	29 mg B/L ( <i>Rana pipiens</i> ) to 41 mg B/L ( <i>Bufo fowleri</i> )

Based on the acute data for freshwater species, this substance is not classified as hazardous to the environment.

### Marine and Estuary—Chronic Studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric NOEC/ EC <sub>10</sub> )
Algal	19	5 mg B/L ( <i>Emiliana huxleyi</i> ) to >100 mg B/L ( <i>Agmenellum quadruplicatum</i> , <i>Anacystis marina</i> , <i>Thalassiosira pseudonana</i> )

### Marine and Estuary—Acute Studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric EC/LC <sub>50</sub> )
Invertebrate	3	45 mg B/L ( <i>Litopenaeus vannamei</i> ) to 83 mg B/L ( <i>Americamysis bahia</i> )
Fish	2	74 mg B/L ( <i>Limanda limanda</i> ) to 600 mg B/L ( <i>Oncorhynchus tshawytscha</i> )

No data are available for algal species.

### Sediment

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric EC/LC <sub>50</sub> )
Invertebrate	1	82.4 mg B/kg sediment dw ( <i>Chironomus riparius</i> )

Results: Although limited, the data suggest that sediment organisms are within range of toxicity of aquatic organisms. In addition, the substance will not partition to the sediment, so a sediment/water partitioning approach is justified

## Sewage Treatment Plants (STP)

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric NOEC/EC <sub>10</sub> )
Activated sludge	N/A	>17.5 mg B/L to 100 mg B/L
Microbes	3	10 mg B/L ( <i>Opercularia bimarginata</i> ) to 20 mg B/L ( <i>Paramecium caudatum</i> )

## Terrestrial-Chronic Studies

Taxonomic Group	Number of Taxa Tested	Range of Endpoint Values (geometric NOEC/EC <sub>10</sub> )
Plant	28	7.2 mg B/kg dw ( <i>Zea mays</i> ) to 56 mg B/kg dw ( <i>Allium cepa</i> )
Invertebrates	9	15.4 mg B/kg dw ( <i>Folsomia candida</i> ) to 87 mg B/kg dw ( <i>Caenorhabditis elegans</i> )
Soil micro	7	12 mg B/kg dw (nitrogen mineralization and nitrification test) to 420 mg B/kg dw (soil nitrogen transformation test)

Based on the complete data set, the HC5 value of the species sensitivity distribution is 10.8 mg B/kg dw.

**Phytotoxicity:** Boron is an essential micronutrient for healthy growth of plants. It can be harmful to boron sensitive plants in higher quantities. Care should be taken to minimize the amount of borate product released to the environment.

**Persistence and Degradability:** Biodegradation is not an applicable endpoint since the product is an inorganic substance.

**Bioaccumulative potential:** This product will undergo hydrolysis in water to form undissociated boric acid. Boric acid will not biomagnify through the foodchain.

**Mobility in soil:** The product is soluble in water and is leachable through normal soil. Adsorption to soils or sediments is insignificant.

**Other adverse effects:** None

## 13. DISPOSAL CONSIDERATION

### Disposal methods:

Product packaging should be recycled where possible. Local authorities should be consulted about any specific local requirements. Such product should, if possible, be used for an appropriate application.

## 14. TRANSPORTATION INFORMATION

**Transport Classification for Road (ADR) / Rail (RID); Inland waterways (ADN); Sea (IMDG); Air (ICAO/IATA):** Not Regulated.

## 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture :**

**Clean Air Act (Montreal Protocol) - Substances that deplete the ozone layer:** Not manufactured with and does not contain any Class I or Class II ozone depleting substances.

**Regulation (EC) No 689/2008 - Export and Import of Dangerous Chemicals:** Not listed.

**National Regulations:** Ensure all national/local regulations are observed.

**U.S. EPA RCRA:** This product is not listed as a hazardous waste under any sections of the Resource Conservation and Recovery Act (RCRA) or regulations (40 CFR 261 *et seq.*)

**EPA FIFRA:** This product is a pesticide registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

Following is the hazard information as required on the pesticide label:  
**CAUTION**

Causes moderate eye irritation.

Harmful if swallowed.

Avoid contact with eyes or clothing.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

**Superfund:** CERCLA/SARA. This product is not listed under CERCLA (Comprehensive Environmental Response Compensation and Liability Act) or its 1986 amendments, SARA (Superfund Amendments and Reauthorization Act), including substances listed under Section 313 of SARA, Toxic Chemicals, 42 USC 11023, 40 CFR 372.65, Section 302 of SARA, Extremely Hazardous Substances, 42 USC 11002, 40 CFR 355, or the CERCLA Hazardous Substances list, 42 USC 9604, 40 CFR 302.

**Safe Drinking Water Act (SDWA):** This product is not regulated under the SDWA, 42 USC 300g-1, 40 CFR 141 *et seq.* Consult state and local regulations for possible water quality advisories regarding boron compounds.

**Clean Water Act (CWA) (Federal Water Pollution Control Act):** 33 USC 1251 *et seq.*

a) This product is not itself a discharge covered by any water quality criteria of Section 304 of the CWA, 33 USC 1314.

b) It is not on the Section 307 List of Priority Pollutants, 33 USC 1317, 40 CFR 129.

c) It is not on the Section 311 List of Hazardous Substances, 33 USC 1321, 40 CFR 116.

## FIFRA Labeling:

**Tim-Bor Professional**

**EPA Reg. No. 64405-8**

**Keep Out of Reach of Children**

**CAUTION**

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans & Domestic Animals**

**CERCLA:** This product has a reportable quantity (RQ) of 10,000 lbs based on the RQ for ethylene glycol of 5,000 lbs present at 40-50%. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

**SARA Hazard Category (311/312):** Acute Health, Chronic Health

**SARA 313:** This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): Ethylene Glycol 107-21-1 40-50%

**EPA TSCA Inventory:** This product is regulated under FIFRA, thus exempt.

**IARC:** The International Agency for Research on Cancer (IARC) (a unit of the World Health Organization) does not list or categorize this product as a carcinogen.

**NTP Biennial Report on Carcinogens:** This product is not listed.

**OSHA carcinogen:** This product is not listed.

**California Proposition 65:** This product is not listed on the Proposition 65 list of carcinogens or reproductive toxicants.

## 16. OTHER INFORMATION

**NFPA Rating:** Health = 0 Flammability = 0 Reactivity = 0

**HMIS Rating:** Health = 1\* Flammability = 0 Reactivity = 0

\*Chronic Effects

**SDS Revision History:** 04/28/15: New SDS  
05/29/15: Revised

## WARRANTY DISCLAIMER

The information, data and recommendations contained herein are believed to be accurate but may not be all inclusive and should only be used as a guide. The information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the product for his particular use and on condition that they assume the risk of the use thereof. With respect to this publication and the product related thereto, unless otherwise expressly provided by Manufacturer in writing, **MANUFACTURER MAKES NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

## Remedy/Liability Limits

The exclusive remedy for losses or damages resulting from this publication or the related product (including claims based on contract, negligence, strict liability or other legal theories) shall be limited to, at Manufacturer's sole election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
  2. Replacement of amount of product used.
- Manufacturer shall not be liable for losses or damages resulting from use of this publication or handling or use of this product, **IN NO CASE SHALL MANUFACTURER BE LIABLE FOR CONSEQUENTIAL OR**

**INCIDENTAL DAMAGES OR LOSSES, INCLUDING WITHOUT LIMIT, HEALTH RELATED DAMAGES OR INJURIES.**

The terms of this **Warranty Disclaimer** and **Remedy/Liability Limits** cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Manufacturer or the seller is authorized to vary or exceed the terms of this **Warranty Disclaimer** or **Limitation of Remedies** in any manner.



**100 Nisus Drive • Rockford, TN 37853 USA • (800) 264-0870**

Tim-Bor Professional and Nisus Corporation are registered trademarks of Nisus Corporation. ©2015 Nisus Corporation• #BC-SDS-052915