# BORA-CARE COMMERCIAL

## **Opportunity knocks on steel.**

THE COMMERCIAL GREEN SOLUTION TO TERMITES.



Bora-Care Commercial is applied during new construction to all steel, concrete, wood and other building materials two feet up from the foundation as well as to foundation penetrations such as pipe and conduit penetrations and expansion joints.



#### Bora-Care Commercial is used for commercial structure new construction termite treatments.

- Bora-Care Commercial is a borate-based, EPA-registered primary termiticide.
- Applied during new construction to all steel, concrete, wood and other building materials two
  feet up from the foundation as well as to foundation penetrations such as pipe and conduit
  penetrations and expansion joints.
- Creates a barrier at the foundation of the structure; termites cannot build tubes across treated material to gain access to the structure.
- Speeds up the building process by allowing treatment any time during the dried-in phase of construction before the insulation is installed.
- Helps to get slabs poured quickly. Getting the slab poured is a critical milestone in the construction process, and now having the pretreatment done does not delay the pour.
- Using Bora-Care can earn builders green point in many green building programs such as LEEDs.

Currently not available in Florida

Visit www.nisuscorp.com for the complete line of green products.

100 Nisus Drive = Rockford, TN 37853 = (800) 264-0870 = www.nisuscorp.com



## **BORA-CARE® COMMERCIAL**

Glycol Borate 40% Termiticide Concentrate

## For the Prevention and Control of: Subterranean Termites, Formosan Termites

For use in and around residential, institutional and commercial structures including Apartments, Garages, Museums, Public and Private Institutions, Schools, Hotels, Hospitals, Kennels, Stables, Farm Buildings, Warehouses and Non-Food Areas of Restaurants and Food Processing Plants.

Active Ingredient:	
Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)	40%
Other Ingredients	60%
Total	100%

EPA Reg. No. 83465-1-64405 EPA Est. 83465-TN-1 U.S. Patent Nos. 5,645,828; 7,597,902

## Keep Out of Reach of Children CAUTION

## First Aid Borate Pesticide

If Inhaled	<ul> <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> </ul>		
If on Skin or Clothing	<ul> <li>Take off contaminated clothing.</li> <li>Immediately rinse skin with plenty of water for 15-20 minutes.</li> </ul>		
If in Eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>		

Call a poison control center or doctor for further treatment advice. 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 inhaled or absorbed through skin. Avoid breathing vapors or spray mist. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse. Avoid contamination of food or feed.

#### **Environmental Hazards**

This pesticide is toxic to fish and wildlife. Do not apply directly to water, to intertidal 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. Do not discharge effluent containing this product into lakes, streams, ponds,

estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your state water board or regional office of the EPA.

#### DIRECTIONS FOR USE

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

#### Notice

Read and understand the entire label before using. Use only according to label directions.

Before buying or using this product, read *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*.

#### **Use Restrictions**

Do not use in edible product areas of food processing plants or on countertops and other surfaces where food is prepared. Do not use in serving areas where food is exposed. Do not contaminate feed, water or food. Do not enter or allow others to enter or occupy treated areas until spray has been absorbed into the wood. Treated areas must not be occupied during application.

#### **Phytotoxicity**

This product may be phytotoxic to plants. When treating around the exterior of structures, cover and protect shrubbery and plants that may be potentially exposed to this product, when applied in accordance with the label directions.

#### 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 Bora-Care Commercial in confined spaces, provide ventilation or an exhaust system or use of 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 a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G) or a NIOSH-approved respirator with any N, R, P or HE prefilter is recommended.

#### **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;
- 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.

#### I. Mixing Instructions

Bora-Care Commercial is a concentrate that **must** be diluted with clean water before use. The use of warm or hot water, if available, and an impeller-type mixer that can be used with an electric drill aids the dilution process.

- A. Hand Sprayers: Mix in a clean container and stir the solution until completely uniform. Always mix in a separate container then add the solution to a spray tank. Mixing Bora-Care Commercial directly in a spray tank can block hoses and nozzles.
- **B.** Hand Volume Pumping Systems: Add all of the dilution water to tank, start recirculator and slowly add Bora-Care Commercial concentrate. Mix until uniform.

Use 1:1 Bora-Care Commercial solutions within 24 hours after mixing. 5:1 solutions will remain stable for up to 30 days. Do not leave unused solution under pressure or in tank overnight. Clean and/or flush equipment and lines with water after use.

This product cannot be mixed with any product containing a label prohibition against such mixing.

For tracking purposes an appropriate marker dye or pigment may be added to the Bora-Care Commercial solution. Refer to the dye or pigment product label for the recommended amount to add to the Bora-Care Commercial solution.

Use soap and water to clean up tools.

## II. Dilution Rations by Volume Table A

Target Pests	Mixing Ratios Water plus Bora-Care Commercial	Application Notes
Subterranean and Formosan Termites	1:1 or 2:1	For remedial and preventative treatments apply a 1:1 dilution ratio for all treatments by spray, injection, brush or roller.

#### Table B

Parts Water	Bor	Part a-Care imercial	% Disodium Octaborate Tetrahydrate
1	to	1	23%

#### III. General Information

Bora-Care Commercial solution is not intended for application to soil; it is not a soil termiticide. Do not use to directly treat soil. When active infestations exist, get a professional inspection. Prior to using this product, consult with your state regulatory agency to see if additional qualifications are required to apply this product.

Bora-Care Commercial contains an inorganic borate salt, soluble in water, with insecticidal properties effective against wood destroying organisms, including the target pests listed below. This product may be used as a long-term protective or preventive treatment (before signs of infestations are observed) of wood in new construction. Bora-Care Commercial solution is recommended for protection of all interior and exterior wood (including wood-foam composite structural components). Treatment is long lasting provided the treated material is not exposed to rain, continuous water or in direct contact with the ground. The active ingredient in Bora-Care Commercial is an inorganic salt and once in place it will not decompose or volatilize out of the wood.

### Subterranean Termites: *Reticulitermes, Heterotermes*Formosan Termites: *Coptotermes*

Bora-Care Commercial solutions may be used on all non-food contact surface cellulosic materials including wood, plywood, particle board, paper, oriented strand board (OSB), cardboard (non-food packaging material), wood composite structural components, concrete, block, brick, metals, PVC plumbing pipes and other non-cellulosic materials found in structures. Apply Bora-Care

Commercial solutions only to bare wood, plywood, particle board and other cellulosic materials where an intact waterrepellent barrier, such as paint, stain or sealer, is not present.

In structures where a soil treatment/barrier termiticide has been applied and/or termite bait system installed, apply Bora-Care Commercial solution as an additional treatment to protect wood from subterranean termites that may have penetrated the chemical gaps occurring within the termiticide-treated soil or have bypassed the bait/monitor systems.

## IV. Preventative Treatments and Pretreatments for Subterranean Termites (Crawl Space, Basement and Concrete Slab)

**Note:** This treatment serves as a primary treatment for the control of subterranean termites. This product must be applied with a 1:1 Bora-Care Commercial solution.

In new construction applications for the prevention of subterranean termites, structural wood is defined as: only wood needed for the basic building structure as found in the "dried-in" stage of construction, including wood in direct contact with foundations, interior and exterior wall sill plates, wood studs, wood or cellulosic sheathing, floor joists and sub-flooring.

Apply when access to wooden structural components is optimized and when no further framing modifications will be made, such as after final framing inspection. If treatment is carried out prior to framing inspection, a second visit is required to ensure full treatment is still intact.

In areas where access is limited to 1 or 2 sides of a wood member, including exterior wall base plates and any married studs, apply 2 coats of Bora-Care Commercial solution to the exposed surfaces. Allow first application to dry by waiting at least 20 minutes between applications.

A. Buildings on concrete slabs (including structures with little or no structural wood in contact with the concrete slab foundation): Apply 1 coat of a 1:1 Bora-Care Commercial solution to all wood, metal and/or non-cellulosic base plates and the bottom 2 feet of all wood, metal and/or non-cellulosic studs on all exterior and interior walls in contact with the concrete slab. Treat at the rate of 1 gallon of solution to 200 linear feet of stud walls. Treat all wood in plumbing walls, bath traps and any wood adjacent to plumbing, electrical conduit and duct penetrations to provide a minimum 2 foot wide barrier of treatment between the bottom of the penetration site and the balance of the structure. When spraying base plates, also treat the concrete slab a minimum of 2 inches to a maximum of 8 inches out from plates. Treat the concrete slab where any visible cracks may be occurring, extending treatment 8 to 12 inches out on each side of the concrete slab crack.

**B.** Treat all penetrations (such as plumbing, expansion joints and abutting concrete slabs) by spraying the 1:1 Bora-Care Commercial solution up to 2 feet high and extending application to cover at least 6 inches of concrete slab out from penetration site.

Evenly treat bath traps with a minimum of 8 ounces of the 1:1 Bora-Care Commercial solution to a maximum of 16 ounces per square foot of trap. Treat all concrete slabs at least 1 foot out from all bath trap penetrations.

Concrete, cinder block or non-cellulosic exterior walls must be treated with a 1:1 Bora-Care Commercial solution 2 feet on the interior side of wall surface up from the concrete slab. This treatment must be applied as a continuous 2 foot barrier to all interior surfaces of all exterior walls. Treat at the rate of 1 gallon of a 1:1 Bora-Care Commercial solution to 400 square feet of surface area.

C. Buildings on Crawl Spaces and Basements: Apply 1 coat of a 1:1 Bora-Care Commercial solution in a 2 foot wide uninterrupted band to the point of surface saturation to all structural surfaces in crawl spaces and basements, to include all sills, plates, floor joists, piers, girders and subfloors as well as structural wood exposed to direct vertical access from the soil. Spray the concrete slab surface a minimum of 2 up to a maximum of 8 inches. To prevent termite shelter tubes on basement walls, spray all interior concrete or block foundation walls with a 2 foot band up from the concrete slab. Apply the 1:1 Bora-Care Commercial solution at the rate of 1 gallon per 400 square feet of concrete foundation wall area. To prevent termite shelter tubes on crawlspace walls, apply a 1:1 Bora-Care Commercial solution to crawlspace concrete or block walls in a 2 foot band up from the ground on interior wall surfaces. Apply at the rate of 1 gallon to 400 square feet of surface area. Treat a 2 foot band around construction materials and structural wood adjacent to plumbing, electrical conduit and ducts where they penetrate subfloors, if they provide a direct vertical access from the soil. Treat all structural wood, including wall studs and sills, in finished-out basements where structural wood framing is immediately adjacent to the exterior foundation walls.

If accessible, treat the exterior of structural wood sill areas around the entire perimeter of the structure with a 2 foot wide band of a 1:1 Bora-Care Commercial solution beginning with the sill area and extending upwards onto the sheathing material. On multiple story structures, treat only the first story above the masonry foundation level. Coated or painted structural wood may be treated by pressure injecting Bora-Care Commercial solution into holes drilled into the wood at 8 to 10 inch intervals. Inject at 40 psi for 4 to 6 seconds per hole.

**D. Foam insulation:** Treat with low-pressure surface spraying or by injecting a 1:1 Bora-Care Commercial solution to the infested area at the rate of 1 gallon per 300 to 400 square feet.

**Note:** Some types of foam insulation, such as polyisocyanurate and extruded polystyrene, have closed cell structures that do not allow significant penetration

from surface application. Inject and surface spray these types of insulation.

#### Storage and Disposal

For product packaged in rigid, non-refillable containers less than or equal to 5 gallons.

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

Pesticide Storage: Store in a cool, dry (preferably locked) storage area inaccessible to children and pets. Do not freeze. Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Container Management: Nonrefillable container; do not reuse or refill this container. Triple rinse (or equivalent) container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times, then offer for recycling, if available; or reconditioning, if appropriate; or puncture and dispose of in a sanitary landfill; or by incineration.

#### Storage and Disposal

For product packaged in rigid, non-refillable containers greater than 5 gallons.

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

Pesticide Storage: Store in a cool, dry (preferably locked) storage area inaccessible to children and pets. Do not freeze. Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Container Management: Nonrefillable container; do not reuse or refill this container. Triple rinse (or equivalent) container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available; or reconditioning, if appropriate; or puncture and dispose of in a sanitary landfill; or by incineration.

#### 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. To the extent not prohibited by applicable law, MANUFACTURER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, 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 use/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:

- 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 writing: and b) IN NO CASE SHALL **MANUFACTURER** LIABLE **FOR** ΒE 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.

It is not intended that this product be used to practice any applicable patent, whether mentioned or not, without procurement of a license, if necessary, from the owner, following investigation by the user.



Issued Date: 8/24/1989 Revised Date: 05-28-10

## MATERIAL SAFETY DATA SHEET

## BORA-CARE® COMMERCIAL

Health Emergencies: CHEMTREC® (800) 424-9300

#### **SECTION I - PRODUCT & COMPANY IDENTIFICATION**

Manufacturer: Nisus Corporation 100 Nisus Drive Rockford, TN 37853

(800) 266-0870

Product Trade Name: BORA-CARE® COMMERCIAL

EPA Registration No. 83465-1-64405 Chemical Family: Glycol borate solution

Formula: Proprietary Mixture CAS No.: N/A

#### SECTION II - COMPOSITION

40% Disodium Octaborate Tetrahydrate

60% mixed glycols (monoethylene and polyethylene glycols are used in the manufacturing process)

#### SECTION III - HAZARDS

Hazard Rating: NFPA Health 1 Slight hazard

Flammability 0 Reactivity

Material or Component: Manufactured using Ethylene Glycol CAS No.

107-21-1

Type CEIL TLV 50.00 ppm ACGIH

(Note this is a raw material and there is no free ethylene glycol present.)

EYE CONTACT: Causes moderate eye irritation. Direct contact may cause burning, tearing and redness in sensitive individuals.

SKIN CONTACT: This material is essentially non-irritating. Prolonged or repeated exposure to this material may cause softening of the skin. Persons with preexisting skin disorders may be more susceptible to the effects of this material. Harmful if absorbed through skin.

INGESTION: Ingestion of large amounts may cause nausea, mental sluggishness followed by difficulty in breathing and heart failure, kidney and brain damage, possibly death.

INHALATION: Harmful if inhaled. Breathing high concentrations of vapors may cause nausea, dizziness or drowsiness, and irritation of the nose and throat. Preexisting lung disorders may be aggravated by exposure to this material.

#### SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.

SKIN CONTACT: Take off contaminated clothing. Immediately rinse skin with plenty of water for 15-20 minutes.

EYE CONTACT: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

INGESTION: SEEK EMERGENCY MEDICAL ATTENTION If the victim is drowsy or unconscious, place on the left side with the head down. Do not give anything by mouth. If victim is conscious and alert, vomiting should be induced for ingestion of more than 1 – 2 tablespoons for an adult, preferably with syrup of ipecac under direction from a physician or poison center. If syrup of ipecac is not available, vomiting can be induced by gently placing two fingers in back of throat. If large amounts are ingested, treat for glycol and borate toxicity. If possible, do not leave victim unattended.

NOTE TO PHYSICIAN: Treat for exposure to glycols. Contains borates. Monitor electrolytes.

#### SECTION V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT Above 220°F (Tag Closed Cup)

FLAMMABLE LIMITS: Not known.

EXTINGUISHING MEDIA: CO2, dry powder or universal type foam. FIRE AND EXPLOSION HAZARDS: This material will not readily ignite. FIRE FIGHTING PROCEDURES: Avoid inhaling smoke. The use of a SCBA is recommended for fire fighters. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame.

#### **SECTION VI - SPILL OR LEAK PROCEDURES**

PRECAUTIONS IN CASE OF RELEASE OR SPILL: Absorb with organic liquid absorbent. Do not let material or washwaters enter sewers or waterways. Where large release has occurred see ecological section.

#### **SECTION VI - HANDLING AND STORAGE**

HANDLING AND STORAGE PRECAUTIONS: Store between 40°F and 90°F. Do not store in direct sunlight. Keep containers tightly closed. Store in areas not accessible to children and pets.

Do not store with strong oxidizers.

Locked storage is required for EPA registered materials.

#### SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Good ventilation. When applying Bora-Care in confined spaces, provide ventilation or an exhaust system or use of 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 a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G) or a NIOSHapproved respirator with any N, R, P or HE prefilter is recommended. VENTILATION: Exhaust to ventilate.

Bora-Care is easily washed form eyes and skin.

US EPA requires the following personal protective equipment when applying registered materials:

PROTECTIVE GLOVES: 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.

EYE PROTECTION: Use safety glasses, goggles or face shield. OTHER PROTECTIVE EQUIPMENT: Applicators, mixers and other handlers must wear long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves and protective eyewear. It is recommended that a source of clean water be available in the work area for flushing eyes and washing skin.

#### SECTION IX - PHYSICAL DATA

Specific Gravity: 1.38 g/ml Appearance: Clear viscous gel % Volatile: 36% by weight by TGA (as water)

Vapor Pressure: Negligible (<0.1)

Boiling Point: Above 212° F Odor: None % Solubility in Water: 100%

pH: 50% aqueous solution 6.9 - 7.1

#### **SECTION X - REACTIVITY DATA**

STABILITY: Stable

CONDITIONS TO AVOID: Exposure to strong oxidizing agents. INCOMPATIBILITY (MATERIALS TO AVOID). This material is incompatible with strong oxidizing agents. This product may corrode

HAZARDOUS POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: Ethylene oxide, carbon monoxide, carbon dioxide.

#### SECTION XI - TOXICOLOGICAL INFORMATION

Bora-Care is of very low acute mammalian toxicity.

Acute oral  $LD_{50}$  - greater than 5000 mg/kg body weight (Sprague-Dawley male and female rats).

Acute dermal  $LD_{50}$  - greater than 2000 mg/kg body weight (New Zealand Albino male and female rabbits).

Acute inhalation LC $_{50}$  – 5.06 mg/L for 4 hours (Sprague-Dawley male and female rats).

Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal.

None of the major constituents of this material have been identified as carcinogens or probable carcinogens by IARC or OSHA.

The RfD for ethylene glycol is 2.0 mg/kg/day based on kidney toxicity in rats. US EPA has a high confidence in the study on which the RfD was based. The RfD is protective of animal demonstrated chronic and reproductive effects. Preexisting kidney disorders may be aggravated by exposure to this material.

Borates have been shown to have some chronic toxicity in animals fed high doses, similar to that of alcohol, but this has not been found in humans.

#### **SECTION XII - ECOLOGICAL INFORMATION**

**General:** Boron (B) is the element in disodium octaborate tetrahydrate (the active ingredient in Bora-Care) which is used by convention to report borate product ecological effects. To convert disodium octaborate tetrahydrate into the equivalent boron (B) content, multiply by 0.2096. Bora-Care contains 8.4% B by weight.

**Phytotoxicity:** Boron is an essential micronutrient for healthy growth of plants; however, it can he harmful to boron sensitive plants (e.g. grass and ornamentals) in high quantities.

Algal Toxicity: Green algae, Scenedesmus subspicatus

96-hr  $EC_{10} = 24 \text{ mg B/L}$ 

Invertebrate Toxicity: Daphnids, Daphnia magna straus

24-hr EC<sub>50</sub>=242 mg B/L

Test substance: sodium tetraborate

Fish Toxicity: Seawater:

Dab, Limanda limanda 96-hr LC $_{50}$ 74 MG B/LL

Freshwater:

Rainbow trout, S. gairdneri (embryo-larval stage)

24-day  $LC_{50} = 88 \text{ mg B/L}$ 32-day  $LC_{50}$ ) = 54 mg B/L

Goldfish, Carassius auratus (embryo-larval stage)

7-day  $LC_{50} = 65$  mg B/L 3-day  $LC_{50} = 71$  mg B/L

The  $LC_{50}$  of ethylene glycol = 9500 to 51,000 mg/l depending on organism, so is of no relevance. See above boron ecological information.

In the event of accidental environmental release, dilute with water.

Bora-Care is rapidly diluted to natural background micronutrient levels of boron, and the organic glycol components are biodegraded by microorganisms with a half-life of between 1 and 10 days (90% in one day using OECD 302B Test).

#### **SECTION XIII – DISPOSAL CONSIDERATIONS**

Make up only the amount of solution to be used that day. Excess solution can be used in treatment or further diluted with water and this diluted solution used to dilute product in future applications.

WASTE DISPOSAL METHOD: Unopened containers may be returned to Nisus corporation for reprocessing. Contact your State Pesticide, Environmental Control Agency or local authorities for proper disposal guidelines. Most sewage facilities will allow discharge to sewage of small volumes. Very large volume can retard sewage processing.

#### **SECTION XIV - TRANSPORTATION INFORMATION**

DOT Hazard Classification: Not Regulated

#### **SECTION XV - REGULATORY INFORMATION**

EPA Registration No. 64405-1

Chemical Family: Glycol borate solution

Hazard Rating: NFPA Health 1 Slight hazard

Flammability 0 Reactivity 0

#### **SECTION XVI - OTHER INFORMATION**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This information and product are furnished on the condition that the persons receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof.



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