JECTA

Diffusible Boracide.

WORKS WELL IN TIGHT SPACES.



Jecta is a ready-to-use injectable borate gel used by PMPs to reach places where other products can't be applied effectively. It protects sealed, moisture-laden or inaccessible wood from termites and other wood destroying organisms. Jecta's patented carrier system facilitates rapid penetration throughout wood of any moisture content.



Jecta is a "green" borate-based termiticide, insecticide and fungicide packaged in a 14-oz. caulking tube that fits conveniently into an easy-to-use applicator.

- Controls and prevents drywood termites, subterranean termites, Formosan termites, wood destroying beetles, carpenter ants and decay fungi.
- Highly concentrated 40% active disodium octaborate tetrahydrate with a controlled diffusion rate, providing a long-lasting reservoir of active borate ingredient.
- No known resistance.
- Specifically designed for treating sealed or unsealed wood in contact with ground or soil in high risk, moist and hard-to-reach places.

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

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





DIFFUSIBLE BORACIDE

Kills Infestations, Prevents and Eliminates Termites, Drywood Termites,
Carpenter Ants, Wood-Destroying Beetles, and Fungi (Decay [white rot, brown rot and dry rot])

Long Lasting Protection for Wood in Contact with the Ground

ACTIVE INGREDIENT:

Disodium Octaborate Tetrahydrate (CAS No. 12280-03-4)	40%	EPA Reg. No. 64405-4
OTHER INGREDIENTS:	60%	EPA Est. 66405-TN
TOTAL:1	00%	U.S. Patent No. 5,645,828

KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if inhaled or absorbed through skin. Avoid breathing vapors. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Thoroughly was 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.

FIRST AID Borate Pesticide			
If Inhaled	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. 		
If on Skin or Clothing	• Immediately ringe skin with plenty of water		
If in Eyes	 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. You may also contact 1-800-424-9300 for emergency medical treatment information.

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 walls or cisterns. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsates.

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*.

SAFE HANDLING PROCEDURES

The use of chemical-splash goggles and solvent-resistant gloves is advised. Spills may be cleansed with a damp cloth or absorbed with appropriate materials. When applying Jecta in confined spaces, it is recommended that ventilation or an exhaust system be provided. If this is impractical the use of a NIOSH-approved respirator designed for protection from organic vapors is recommended.

PRODUCT INFORMATION

Jecta is highly concentrated to provide a long-lasting reservoir of active borate ingredient to wood, particularly in high-risk or moist areas. Because of its high concentration and controlled diffusion rate, Jecta is recommended for treating wood in contact with the ground or soil. Jecta controls and prevents wood-decaying fungi, wood-destroying beetles and termites. Jecta has no known resistance.

Jecta eliminates existing wood-destroying insects and fungal infestations and provides residual protection against:

- Subterranean Termites: Reticulitermes, Heterotermes
- Formosan Termites: Coptotermes
- Drywood Termites: Kalotermes, Incisitermes
- · Dampwood Termites: Zootermopsis, Neotermes
- Powderpost Beetles: Lyctidae, Bostrichidae
- Anobiid Beetles: Anobiidae
- · Carpenter Ants: Camponotus
- Old Houses Borers, Longhorn Beetles: Cerambycidae, Hylotrupes
- Ambrosia Beetles: Platypodidae, Scolytidae
- Fungi (Decay [white rot, brown rot and dry rot])

Jecta contains 40% by weight disodium octaborate tetrahydrate formulated in a patented carrier system that facilitates rapid penetration throughout wood of any moisture content. Jecta is particularly suited for treatment of wood that is coated with a water-repellent finish or is in ground contact, such as fence posts and utility poles. It is not necessary to remove any wood finish prior to injection of Jecta.

Use of this product does not substitute for mechanical alteration, soil treatment or foundation treatment, but is merely a supplement to a termiticide monitoring control program.

In new construction, Jecta is to be used as a supplemental treatment in conjunction with termiticide treatments. For existing structures, use Jecta as a remedial treatment. The 40% active borate gel diffuses deep into wood and allows access to painted, stained or sealed wood. Use Jecta for hard-to-reach areas including: Flooring and foundation systems; window and door framing and headers; exterior steps, porches and decks; roof trim and soffits; infested or susceptible support beams; porches and garages; fence posts; pilings and piers; log construction; utility poles; railroad ties (sleepers).

NOTE: If any wood member's structural integrity has been reduced to the extent that repair or replacement is necessary, make such repairs and/or replacement prior to treating with Jecta. Jecta does not add structural integrity to previously damaged wood.

I. APPLICATION METHODS

Jecta is designed for application to wood by injection into voids, checks, cracks, pre-drilled holes or injection sleeves designed for this purpose. To facilitate reapplication in high-risk areas, use a plug of material such as cork rubber, wood or caulk to seal the injection site.

Inject Jecta through any wood surface coating. Place injection sites in either a staggered, linear or angled pattern. Inject Jecta throughout the infested area and for at least 6 inches on either side of wood showing any signs of infestation.

Space injection holes at even intervals throughout the infested area to provide the best distribution of Jecta. Drill holes at a downward angle to help retain liquid in place while sealing hole. If a long section of a beam or member is being treated, do not exceed a 24-inch spacing between holes.

II. APPLICATION STEPS

- 1. Measure the dimensions and length of the zone of wood to be treated. If the zone has an active infestation, calculate amount to include an additional six (6) to twelve (12) inches in either side of the infested area. Refer to Table 1 for the amount of Jecta required to treat various size wood members.
- 2. Refer to Table 2 and select the appropriate size and number of holes to accommodate the required amount of Jecta. If possible, drill holes to extend to the center of the wood member being treated. Do not drill holes that significantly decrease the structural strength of any wood member.
- 3. Inject the proper amount of Jecta into holes.
- Seal holes with a cork, plastic or wooden plug, exterior wood putty or rubber stopper.
- Remove any excess Jecta from the surface with a damp cloth or sponge.

TABLE 1

Note: If possible, angle holes downward to prevent liquid from escaping hole after injection. Never space holes more than 24" apart along the length of any wood member being treated.

DIMENSIONAL LUMBER			
Actual Size (inches)	Amount Required per Lineal Foot (cc)		
2 X 2	2		
2 X 4	4		
2 X 6	5		
2 X 8	7		
2 X 10	8		
2 X 12	10		
4 X 4	7		

ROUND LOGS, POLES AND TIMBERS			
Diameter (inches)	Amount Required per Lineal Foot (cc)		
4	5		
6	12		
8	21		
10	33		
12	48		
14	63		

SQUARE AND RECTANGULAR LOGS AND BEAMS			
Actual Size	Amount Required per		
(inches)	Lineal Foot (cc)		
4 X 4	7		
4 X 6	10		
4 X 8	13		
4 X 10	17		
4 X 12	20		
6 X 6	15		
6 X 10	25		
6 X 12	30		
8 X 8	27		
8 X 10	33		
8 X 12	39		
10 X 10	42		
12 X 12	60		

TABLE 2
Liquid Capacity for Various Sized Holes
in Cubic Centimeters

Depth	Hole Diameter (inches)			
(inches)	(3/8)	(1/2)	(5/8)	(3/4)
1	1.8	3.2	5.0	7.1
2	3.6	6.4	10.1	14.6
3	5.4	9.7	15.1	21.8
4	7.2	12.9	20.2	29.1
5	9.0	16.1	25.2	36.4
6	10.8	19.3	30.2	43.7
7	12.6	22.5	35.3	51.0
8	14.4	25.7	40.3	58.2
9	16.2	28.9	45.4	65.5
10	18.0	32.2	50.4	72.8

III. APPLICATION SITES

Use Jecta in areas where wood decay or insects are present or in high-risk areas vulnerable to infestation, such as wood that remains moist or is subject to frequent wetting, or wood that is in contact with the ground or soil. Examples include:

Flooring and Foundation Systems – especially around kitchens and bathrooms where leaky plumbing, bath traps or deteriorated caulking and inadequate moisture barriers may be present.

Window and Door Framing and Headers – where weathered paint or caulk provides inadequate protection against moisture. The corners, in particular, often exhibit signs of decay.

Exterior Steps, Porches and Decks – where damage may be found in columns, railings, floors and support members.

Roof Trim and Soffits – especially fascia boards supporting gutter systems and soffits; where wood is in contact with skylights, vents, flashing or chimneys and wherever excessive moisture is found.

Attics and Roofing – where leaks may cause decay damage to support members and rafters.

Porches and Garages – where wood contacts concrete slabs or brick walls are adjacent to dirt filled porches. The base of garage door frames, for example, is particularly susceptible to infestation by decay, termites and carpenter ants.

Fence Posts, Pilings and Piers – apply within six inches of the ground line as well as on top of the post and into existing cracks and checks.

Log Construction – in any decayed or susceptible areas or where a water-repellant finish is present such as corners, joints, ends and lower courses; and especially into upward facing cracks and checks that allow water entry. Apply directly into beetle emergence holes and carpenter ant galleries.

Utility Poles – in susceptible areas such as the groundline and where cross-arms are attached. Use wherever an active infestation is present or where preventative maintenance is desired.

Railroad Ties (Sleepers) – adjacent to rail plates, in cracks and checks where water accumulates, and in any infested or susceptible area.

Note: SPILLED JECTA MAY STAIN SOME WOOD FINISHES. IF NECESSARY, PROTECT SURFACE DURING APPLICATION AND WIPE UP EXCESS WITH A DAMP CLOTH.

STORAGE AND DISPOSAL

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

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 Disposal: Non-refillable container; do not reuse or refill this container. Clean container promptly after emptying, then offer for recycling, if available, or reconditioning, if appropriate; or puncture and dispose of container in a sanitary landfill; or, if allowed by state and local authorities, 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.

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 the 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 or the manner of use/application, all of which are beyond the control of the seller. All such risks shall be assumed by the buyer.

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 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.



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MATERIAL SAFETY DATA SHEET

Health Emergencies: CHEMTREC® (800) 424-9300

SECTION 1 - PRODUCT & COMPANY INFORMATION

Manufacturer: Nisus Corporation

100 Nisus Drive Rockford, TN 37853 (800) 266-0870

Product Trade Name: JECTA® EPA Registration No. 64405-4 Chemical Family: Glycol borate solution

CAS Nos.: 12280-03-04; 25322-68-3; 107-21-1 Formula: Proprietary Mixture

SECTION 2 - INGREDIENTS INFORMATION

40% Disodium Octaborate Tetrahydrate

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

SECTION 3 - HEALTH HAZARD INFORMATION

Hazard Rating: NFPA Health 1 Slight hazard

Flammability 0 Reactivity 0

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

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 4 - 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

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 5 - FIRE & EXPLOSION 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 6 - ACCIDENTAL RELEASE MEASURES

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 7 - 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 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: Good ventilation. When applying JECTA 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.

VENTILATION: Exhaust to ventilate.

JECTA is easily washed from eyes and skin.

US EPA requires the following personal protective equipment when applying registered

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 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear viscous gel

% Volatile: 36% by weight by TGA (as water)

Vapor Pressure: Negligible (<0.1)

Odor: None

Specific Gravity: 1.38 g/ml

Boiling Point: Above 212° F % Solubility in Water: 100%

pH: 50% aqueous solution 6.9 - 7.1

SECTION 10 - STABILITY AND REACTIVITY

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 aluminum.

HAZARDOUS POLYMERIZATION: Will not occur

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

SECTION 11 - TOXICOLOGY

JECTA 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 12 - ECOLOGICAL INFORMATION

General: Boron (B) is the element in disodium octaborate tetrahydrate (the active ingredient in JECTA) 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. JECTA 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

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

Invertebrate Toxicity: Daphnids, Daphnia magna straus

24-hr EC₅₀=242 mg B/L

Test substance: sodium tetraborate

Fish Toxicity:

Seawater:

Dab, Limanda limanda

96-hr LC₅₀ 74 MG B/LL

Freshwater:

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

24-day LC₅₀ = 88 mg B/L

32-day LC₅₀) = 54 mg B/L

Goldfish, Carassius auratus (embryo-larval stage)

7-day $LC_{50} = 65 \text{ mg B/L}$

3-day $LC_{50} = 71 \text{ mg B/L}$

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.

JECTA 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 13 - DISPOSAL CONSIDERATION

Product is supplied in a re-sealable container and can be re-sealed and stored for future use if not all used up. Empty container can go to plastic re-cycling.

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 14 - TRANSPORTATION INFORMATION

DOT Hazard Classification: Not Regulated

SECTION 15 - REGULATORY INFORMATION

EPA Registration No. 64405-4

Chemical Family: Glycol borate solution

Hazard Rating: NFPA Health 1 Slight hazard

Flammability 0 Reactivity 0

SECTION 16 - 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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