

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Oct 23, 2000

Mr. Lawrence A. Miller  
GHARDA USA Inc.  
115 Obtuse Hill  
Brookfield, CT 06804

Subject: Navigator 4WT, Label Amendment to Comply with the Chlorpyrifos MOA  
EPA Reg No.: 70907-13  
Submission Dated: July 23, 2000

Dear Mr. Miller:

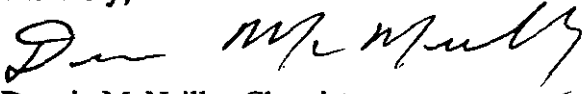
The revised labeling referenced to above, submitted in connection with the registration under the Federal Insecticide, fungicide, and Rodenticide Act (FIFRA) as amended, is acceptable provided that you make the labeling changes indicated before you release the product for shipment bearing the amended labeling:

- 1) On page three, add the following after "eye protection": "(goggles, face shield, or safety glasses with front, brow, and temple protection)".
- 2) On page five, change the heading "In-Place Treatment of Utility Poles and Fence Posts" to "In-Place Treatment of Utility Poles and Fence Posts (Non-Residential Sites Only)".

As requested in your letter of July 12, 2000 and phone call of July 19, 2000, the conditions of paragraph 5 of the June 2000 Memorandum of Agreement apply to this label amendment, specifically this amended label is effective Dec 1, 2000. Failure to comply with any of the conditions of registration set forth in Paragraph 10 the MOA shall be grounds for cancellation of the affected registration(s) under FIFRA section 6(e). Submit one copy of the revised final printed label before releasing the product for shipment. If the conditions enumerated above are not complied with, the registration will be subject to cancellation in accordance with FIFRA Section 6(e).

A stamped copy of the label is enclosed for your records. If you have questions, please contact me on (703) 308-6742 or electronically at [McNeilly.Dennis@EPA.gov](mailto:McNeilly.Dennis@EPA.gov).

Sincerely,



Dennis McNeilly, Chemist  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

**RESTRICTED USE PESTICIDE**  
For retail sale to and use only by certified Applicators or persons under their direct supervision and only for those uses covered by the certified Applicator's certification

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:  
OCT 23 2000  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
70907-13

# Navigator 4WT

Chlorpyrifos Wood Treatment Concentrate

For control of wood-infesting insects in lumber, logs, and other wood products.  
For Industrial and commercial use only.

Active Ingredient:

chlorpyrifos : O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl)	
phosphorothioate.....	45.0%
Inert Ingredients:.....	55.0%
Total	100.0%

Contains petroleum distillate  
Contains 4 pounds of chlorpyrifos per gallon

## Keep Out of Reach of Children

### WARNING AVISO

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

See booklet on back for additional precautionary statements.

EPA Reg. No. 70907-13  
EPA Est. No. 70907-X

Navigator is a trademark of Gharda USA, Inc.

Net Contents: 2 gallons

## **Navigator 4WT Chlorpyrifos Wood Treatment Concentrate**

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### **PRECAUTIONARY STATEMENTS**

#### **Hazards to Humans and Domestic Animals**

#### **WARNING AVISO**

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

May Be Fatal If Swallowed • Excessive Absorption Through Skin May Be Fatal • Causes Substantial But Temporary Eye Injury • Causes Skin Irritation

Do not get in eyes, on skin, or on clothing. Avoid breathing vapors and spray mist. Handle concentrate in a ventilated area. Wear eye protection. Wear protective clothing and chemically resistant gloves when handling. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Keep away from food, feedstuffs, and water supplies.

#### **First Aid**

**If Swallowed:** Call a physician or Poison Control Center immediately. Do not induce vomiting. Contains an aromatic petroleum solvent. Do not give anything by mouth to an unconscious person.

**If on Skin:** Immediately wash with plenty of water. Get medical attention.

**If in Eyes:** Flush with plenty of water for 15 minutes. Get medical attention.

**If Inhaled:** Remove victim to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately.

**Note to Physician:** Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.

#### **Environmental Hazards**

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water by cleaning of equipment or disposal of waste.

#### **Physical or Chemical Hazards**

Do not use or store near heat or open flame.

Refer to label booklet for additional precautionary information and Directions for Use.

#### **Directions For Use**

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

Read all Directions for Use carefully before applying.

Do not formulate this product into other end-use products.

## Navigator 4WT Chlorpyrifos Wood Treatment Concentrate

### **Storage and Disposal**

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

**Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 122° F for extended periods of time. Storage below 40° F may result in formation of crystals. If product crystallizes, store at 55° F to 75° F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Metal Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

**Plastic Container Disposal:** Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### **General Information**

Navigator WT insecticide is an emulsifiable concentrate that can be diluted with water or a suitable base oil (such as mineral spirits) to protect lumber, logs, pallets, poles, posts, wooden containers, and processed wood products (such as chips and composite materials) from insect attack. Applications may be made by dipping, brushing, spraying, or by pressure treatment. For longer control use the higher use rates and/or apply by pressure treating.

Wood destroying insects are often very small. Therefore complete coverage of the wood product is essential for optimal control. Application by dipping, spraying, or brushing is a surface treatment. Milling or cutting surface treated wood may expose unprotected wood for insect attack. Where control of wood rotting or staining organisms is desired, an appropriate fungicide will need to be added to the treatment solution or applied separately.

### **Handling Procedures**

Wear protective clothing including eye protection and chemically resistant gloves when using this product to reduce exposure to eyes and skin.

To avoid breathing spray mist during application in confined areas wear a mask or respirator of a type recommended by NIOSH for filtering spray mists.

Wood can be safely handled without the use of protective clothing when dry. Refer to respective safety information concerning handling precautions for cobicides and/or solvents.

### **Mixing Directions**

Dilute Navigator 4WT with water or suitable oil according to the tables below. Agitate during filling to ensure uniform mixing.

## Navigator 4WT Chlorpyrifos Wood Treatment Concentrate

Table 1 - Dilution Chart

Gallons of Mixture Desired	Gallons of Navigator 4WT Needed for Water-Based Mix		
	0.5%	1.0%	2.0%
50	0.6	1.1	2.2
100	1.1	2.2	4.4
250	2.7	5.3	10.6
500	5.3	10.6	21.3
1,000	10.6	21.3	42.6

Table 2 - Dilution Chart

Gallons of Mixture Desired	Gallons of Navigator 4WT Needed for Oil-Based Mix*		
	0.5%	1.0%	2.0%
50	0.4	0.8	1.7
100	0.9	1.7	3.3
250	2.1	4.2	8.3
500	4.2	8.3	16.7
1,000	8.4	16.7	33.2

\* Assumes oil weighs 6.5 lbs/gallon

### Tank Mixing

Unless prohibited by a product's label, users can tank mix pesticides currently labeled for similar use patterns. It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be run to check for chemical compatibility prior to tank mixing.

### Direction For Application

To control infesting insects such as ~~termites~~, carpenter ants, ambrosia beetles (*Scolytidae*), powder-post beetles (*Lyctidae*), false powder-post beetles (*Bostrichidae*), deathwatch beetles (*Anobijidae*), old-house borers (*Cerambycidae*), and others treat the wood with up to a 1% dilution of chlorpyrifos. ~~Use up to a 2% dilution for certain utility pole and post treatments.~~ Monitoring of the treating solution may be necessary to ensure that the desired level of chlorpyrifos is maintained, particularly where the treating solution may be used for an extended time period.

Dip, spray, and brush treatments are intended to kill localized infestations of ~~workers and winged reproductive forms of termites~~ and to prevent infestation for a temporary period. These applications are not intended as a substitute for soil or pressure treatments.

### Dip Treatment

Beetles and wood-infesting ants, and ~~termites~~ may be controlled in freshly cut lumber, wooden containers, millwork, pallets, and processed wood products by dipping. Use rates up to 1%. Rates of 0.5% to 1% are recommended to ensure residual protection. The wood should be totally submerged in the dilution until thoroughly wet (minimum 3 minutes) and then allowed to dry in a suitable location. Dipping solutions

## Navigator 4WT Chlorpyrifos Wood Treatment Concentrate

should be monitored to ensure the desired level of chlorpyrifos is maintained. Dipping solutions should be agitated if left unused for a period of time (such as overnight). For optimal performance and economy, avoid heavy buildup of wood debris in dip tanks as chlorpyrifos may bind to the debris and thus reduce the strength of the dilution.

### **Spray Treatment and Brush Treatment**

Beetles and wood-infesting ants and termites may be controlled in lumber, logs, wooden containers, millwork, poles, posts, and processed wood products by spraying or brushing. A 0.5% to 1% dilution is recommended for maximum efficacy. The wood should be sprayed or brushed thoroughly, including backs and ends, with the treatment mixture. Apply to surfaces, voids, and channels where insects may be located. When spraying, use a sprayer capable of delivering a coarse, low pressure (about 20 psi) spray. On logs, ensure thorough bark coverage as untreated areas are subject to insect attack. When treating processed wood products Navigator 4WT may be sprayed onto wood chips (wood particles) or mixed with compatible adhesive. The Navigator 4WT adhesive mixture may be applied by methods suitable for application of the adhesive mixture (such as spraying, rollers, or blending). Test compatibility and application method on a small scale prior to full scale production.

### **Pressure Treatment**

For maximum, long-term control of beetles and wood-infesting ants and termites in lumber, wooden containers, millwork, pallets, processed wood products, utility poles and fence posts apply by pressure treatment. Combine with an appropriate fungicide for control of wood-decay organisms. Navigator 4WT may be applied in either oil-borne or water-borne systems. Treat to attain a minimum retention of 0.0175 pcf (pounds per cubic foot) in the appropriate assay zone. Depending upon the treatment process this usually requires a .025% to 1% dilution. Use lower concentrations for full-cell treatment and higher concentrations for empty-cell treatment.

### **In-Place Treatment of Utility Poles and Fence Posts**

**Preventative Treatment:** For the preventative control of termites when placing a pole or post in service, use a 0.5% ~~1% to 2%~~ dilution. After pole or post has been dug, mix the dilution with the soil as it is being replaced to a depth of approximately 10 inches. Place pole or post on top of this layer. Mix the remaining soil fill with treatment solution while back-filling the hole. The treated soil zone around the post or pole should be approximately 6 inches wide. Soil for the base layer and back-fill of each pole or post should be treated at a rate of 4 gallons of dilution per 10 cubic feet of soil.

**Remedial Treatment:** To control existing infestations of termites or to prevent infestation of poles and posts already in place, use a 0.5% ~~1% to 2%~~ dilution. The solution should be injected into termite galleries or channels in the wood. For maximum protection, injection sites should be at or below ground level.

Poles and posts may also be treated by rodding down to the base. Rod holes should be placed approximately 3 inches away from the pole and 6 inches apart. Inject approximately 12 fluid ounces of dilution per foot of depth into each rod hole.

It may be appropriate to use one or both treatment techniques depending upon the specific circumstances at the work site (such as soil type). Retreatment may be made any time there is evidence of reinfestation, disruption, or loss of the barrier due to construction, excavation, landscaping, etc. Annual retreatment is prohibited unless reinfestation or barrier disruption has occurred.

## **Navigator 4WT Chlorpyrifos Wood Treatment Concentrate**

### **Notice of Warranty and Disclaimer**

Seller warrants that at the time of delivery the product in this container conforms to its chemical description contained hereon and is reasonably fit for its intended purpose under normal conditions of use. This is the only warranty made on this product. Seller expressly disclaims any implied warranties of merchantability or fitness for any particular purpose and, except as set forth above, any other express or implied warranties. Any damages arising from breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid for this product by Buyer, and shall not include incidental or consequential damages such as, but not limited to, loss of profits or values. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of the Seller. In no such case shall Seller be liable for the consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. Buyer acknowledges the use of its own independent skill and expertise in the selection and use of the product and does not rely on any oral or written statements or representations.

July 10, 2000