

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AUG 25 1993

3005440516  
17/B

Mr. S. K. Theodorakis  
Zenaca Inc.  
Zenaca Ag Products  
P.O. Box 751  
Wilmington, DE 19897

Dear Mr. Theodorakis:

Subject: Revised Labeling - Directions For Use  
Demon TC Insecticide  
EPA Registration No. 10182-107  
Torpedo Insecticide  
EPA Registration No. 10182-95  
Your Applications Dated April 19, 1993

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act sec. 3(c)(7)(A), is acceptable provided that you:

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA sec, 3(c)(5) or FIFRA sec. 4 when the Agency requires all registrants of similar products to submit such data.

2. Make the following labeling change: Under Volume Adjustment Chart the Vertical Volume Allowed should be in "gallons emulsion/linear feet".

3. Submit five copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Stamped copies of the label is enclosed for your records.

Sincerely,

George T. LaRocca  
Product Manager 13  
Insecticide-Rodenticide Branch  
Registration Division (H7505C)

Enclosure		CONCURRENCES					
SYMBOL							
SURNAME	Helbert						
DATE	8-26-93						

**TORPEDO™ Insecticide**

ONLY FOR SALE TO, USE AND STORAGE BY PROFESSIONAL  
PEST CONTROL OPERATORS

**ACTIVE INGREDIENT:**

**Permethrin**

(3-phenoxyphenyl)methyl(±)-cis,trans-3-(2,2-dichloroethenyl)-2,  
2-dimethylcyclopropanecarboxylate\* ..... 25.6%

**INERT INGREDIENTS** ..... 74.4%

**TOTAL** ..... 100.0%

\*Cis/trans ratio: Min. 35% (±) cis and max. 65% (±) trans  
TORPEDO contains 2 pounds active ingredient per gallon.

EPA Est. No.  
EPA Reg. No. 10182-95  
U.S. Patent No. 4,024,163

Net Contents:

**KEEP OUT OF REACH OF CHILDREN**

**WARNING**

Made in U.S.A.  
ICI Professional Products  
ICI Americas Inc.  
Wilmington, DE 19897

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

AUG 25 1993

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

10182-95

### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Do not induce vomiting. Call a physician or Poison Control Center. Vomiting should be supervised by a physician or the professional staff because of the possible pulmonary damages from aspiration of the solvent.

**IF IN EYES:** Flush eyes with plenty of water. Get medical attention if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water.

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**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL 1-800-F-A-S-T-M-E-D (327-8633)**

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.**

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### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

##### WARNING

HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN. MAY CAUSE EYE IRRITATION. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling.

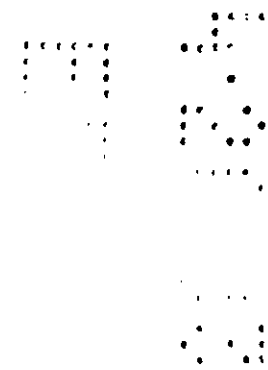
##### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on crops or weeds. Do not apply TORPEDO, or allow it to drift to crops or weeds on which bees are actively foraging. Additional information may be obtained from Cooperative Extension Service. Apply this product only as specified on this label.

##### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.



## DIRECTIONS FOR USE

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

### GENERAL INFORMATION ON THE USE OF THIS PRODUCT FOR TERMITE CONTROL

Chemicals for soil treatment are used to establish a barrier against termite attack. The chemical emulsion must be adequately dispersed in the soil to provide a barrier between the wood in the structure and the termite colonies in the soil.

For the effective use of this product, it is necessary that the service technician be familiar with current control practices including trenching, rodding, subslab injection, and low-pressure spray applications. These techniques must be correctly employed to prevent or control infestations by subterranean termite species of *Reticulitermes*, *Zootermopsis*, *Heterotermes* and *Coptotermes*. Choice of appropriate procedures should include consideration of such variable factors as the design of the structure, water table, soil type, soil compaction, grade conditions, location and type of domestic water supplied and drainage systems. The biology and behavior of the termite species involved are important factors to be known as well as suspected location of the colony and severity of the infestation within the structure to be protected.

Effective termite control also includes elimination of termite access to moisture by recommending repair of faulty construction grade and/or plumbing. Remove all wood and cellulose containing debris in contact with soil from crawl spaces, porches, and around foundations.

For advice concerning current control practices with relation to the specific local conditions, consult resources in structural pest control and the State regulatory agency.

### SUBTERRANEAN TERMITE CONTROL

#### USE DIRECTIONS

Apply only to establish subsurface termite control barriers specified on product labeling. Avoid contamination of public and private water supplies by following these precautions:

- Use anti-backflow equipment or procedures to prevent siphonage of pesticide back into water supplies.
- Do not treat soil beneath structures that contain wells or cisterns.
- Extreme care must be taken to avoid runoff. Do not treat soil that is water-saturated or frozen.

Consult State and local specifications for recommended distance of treatment areas from wells. Refer to Federal Housing Administration Specifications for guidance on preconstruction treatments if no State or local government recommendations are available.

**After Treatment:** Securely plug all holes drilled in construction elements of commonly occupied areas of structures, including unfinished basements, enclosed porches, garages, and workshops.

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**APPLICATION VOLUMES**

To ensure thorough coverage in different soil types, it may become necessary to adjust the volume being applied, provided there is a corresponding rate adjustment so that the amount of active ingredient applied to the soil remains the same. In situations which will not accept large amounts of water, such as clay-rich soils, reduced volumes of emulsion can be used which will deliver the appropriate concentration of termiticide to the soil. This may also apply to sensitive areas and/or applications where less volume may be desirable.

Where soil conditions will not accept application of specified volume (gallons) of emulsion, the 1% emulsion may be applied at one-half the application volume or a 2% emulsion may be applied at one-half the labeled application volume.

**NOTE:** When volume is reduced, the hole spacing for subslab injection and soil rodding may require similar adjustments to account for lower volume dispersal of the termiticide in the soil. Volume adjustments at 2% are not recommended for subslab injection.

<b>VOLUME ADJUSTMENT CHART</b>			
Volume Allowed	Rate (% Emulsion)		
	0.5%	1%	2%
Horizontal (gallons emulsion/10 ft <sup>2</sup> )	1 gallon	½ to 1 gallon	¼ to ½ gallon*
Vertical (gallons emulsion/10 ft <sup>2</sup> )	4 gallons	2 to 4 gallons	1 to 2 gallons*

\* Not recommended for subslab injections.

**PRECONSTRUCTION SUBTERRANEAN TERMITE TREATMENT**

Effective preconstruction subterranean termite control requires the establishment of an unbroken vertical and/or horizontal chemical barrier between wood in the structure and the termite colonies in the soil.

To meet F.H.A. termite-proofing requirements, follow the latest edition of the Housing and Urban Development (H.U.D.) Minimum Property Standards.

Use a 0.5 to 1.0% emulsion for subterranean termites. Mix 2-4 gallons of TORPEDO in 98 gallons of water. ~~Where soil conditions will not accept application of specified volume (gallons) of 0.5% emulsion, the 1.0% emulsion may be applied at one-half the application rate or 2 gallons per 10 linear feet. Distribute the treatment evenly.~~

After grading is completed and prior to pouring of the slab, slab-supported or constructed porches, and other critical areas, make the following treatments:

**HORIZONTAL BARRIERS:** Before footings are poured, horizontal barriers may be established in footing trenches. Then, after interior grading is completed and prior to the

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pouring of concrete slabs, horizontal barriers may be established on soil that will be covered by floors, entrance platforms, or porches, and in other critical areas that will be covered by construction. To provide a horizontal barrier, apply the emulsion at the rate of 1 gallon per 10 square feet to fill dirt. If fill is washed gravel or other coarse material, apply at 1-1/2 gallons per 10 square feet.

- It is important that the emulsion reaches the soil.
- Applications shall be made with low pressure (less than 50 p.s.i. at the nozzle) using a coarse-spray nozzle when establishing horizontal barriers.
- If concrete slabs cannot be poured over soil the same day it has been treated, a waterproof cover, such as polyethylene sheeting, should be placed over the soil to prevent erosion. This is not necessary if foundation walls have been installed around the treated soil.

**VERTICAL BARRIERS:** After the foundation walls have been poured or built, vertical barriers may be established around the perimeters of floating or supported slabs, around utilities penetrating the slab, and in other critical areas. After the final exterior grading is completed, vertical barriers may be created in back-filled soil against foundation walls. To produce a vertical barrier, apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth from grade to the top of the footing. For example, a footing 3 feet deep would require 12 gallons of emulsion per 10 linear feet.

~~If soil will not accept the volumes specified, a 1.0% emulsion may be applied at one-half the application rate, 2 gallons per 10 linear feet. Distribute the treatment evenly.~~

Outside and inside perimeter applications may be made by rodding and/or trenching. When rodding from grade or from the bottom of a shallow trench, rod holes should be spaced in a manner that will allow for application of a continuous chemical barrier. Rod holes should not extend beneath the top of the footings, except when the footing is exposed at or above grade. Special care should be taken to avoid soil washout around the footing.

A trench need not be wider than 6 inches. Rod from the base of a shallow trench to the top of the footings. Low-pressure spray (less than 50 p.s.i. at the nozzle) may be used to treat soil which will be replaced in the trench. Mix the emulsion with the soil as it is being replaced in the trench.

Soil should be treated around sewer lines, plumbing, or around any other utility extending from the slab through a slab.

**HOLLOW MASONRY UNITS OF THE FOUNDATION:** In preconstruction situations in which application is not made to soil prior to pouring the footing, treat so as to make a continuous chemical barrier in the voids. Apply the emulsion at the rate of 2 gallons per 10 linear feet. Apply the emulsion so it will reach the footing.

Do not treat in this manner through voids in walls constructed on interior slabs such as basement floors.

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**CRAWL SPACES:** For crawl spaces apply at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth from grade to the top of the footing. Application may be made by rodding and/or trenching. If the footing is exposed at or above grade, application should be made with special care to avoid washout around the footing. Treatment should include both sides of foundation and around all piers and pipes extending from the soil. ~~If soil will not accept the volumes specified, a 1.0% emulsion may be applied at one half the application rate, 2 gallons per 10 linear feet. Distribute the treatment evenly.~~

Rod holes should be spaced to provide a continuous chemical barrier.

Trench need not be wider than 6 inches nor below the foundation. The emulsion should be mixed with the soil as it is being replaced in the trench.

**MONOLITHIC SLABS:** In the case of a single-pour monolithic slab that does not have a separate foundation or footing, an overall horizontal barrier should be created before the concrete is poured using a rate of 1 gallon of emulsion per 10 square feet. If fill is washed gravel or other coarse material, apply at the rate of 1-1/2 gallons per 10 square feet. Critical areas beneath the slab such as utility pipe entries may be treated at the rate of 4 gallons per 10 linear feet around the pipe.

Exterior vertical barriers should be created after the concrete has been poured and final grade established. Apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth to the bottom of the concrete.

#### POSTCONSTRUCTION TREATMENTS

Use a 0.5 to 1.0% emulsion for subterranean termites. Mix 2-4 gallons of TORPEDO in 98 gallons of water.

Postconstruction applications shall be made by subslab injection, rodding, and/or trenching using low-pressure spray not exceeding 25 p.s.i. at the nozzle.

Rodholes or trenches should not extend below the footing because of the possibility of soil washout by the emulsion.

Do not apply emulsion until location of heat or air-conditioning ducts, vents, and water and sewer (or plumbing) lines are known and identified. Extreme caution must be taken to avoid contamination of these structural elements and airways.

**SLAB-ON-GROUND:** Vertical barriers may be established by subslab injection inside and rodding and/or trenching outside at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth. ~~A 1.0% emulsion may be applied at one half the application rate, 2 gallons per 10 linear feet.~~ Special care must be taken to distribute the treatment evenly. ~~Injectors should not extend below the tops of the footings.~~

Treat the soil from grade to the top of the footing along the outside and, where necessary, along the inside of the foundation perimeter. Treatment may also be required along one side of a partition wall (especially where the wall is connected to the floor by fixtures inserted in the slab) and along cracks, expansion joints, and other critical areas.

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Horizontal barriers may be established where necessary by long rodding or by a grid pattern injection using a rate of 1 to 1½ gallons of emulsion per 10 square feet depending on fill type and condition.

Drill holes should be spaced in a manner that will allow for application of a continuous chemical barrier.

Where necessary, drill through the foundation walls from the outside and inject the chemical just beneath the slab or along the inside of the foundation.

Along the outside of the foundation walls where shallow foundations exist (1 foot or less), dig a narrow trench approximately 6 inches wide and not below the top of the footing. Apply the emulsion at the rate of 2 gallons per 10 linear feet. As the soil is being replaced into the trench, apply another 2 gallons per 10 linear feet to the backfill.

When making soil applications to the foundations extending deeper than 1 foot, follow instructions under **BASEMENTS - Outside Perimeter**. (See exception for monolithic slabs.)

**HOLLOW MASONRY UNITS OF FOUNDATION WALLS:** Treatment may be made through masonry voids to establish a continuous chemical barrier at the top of the footing. Apply at the rate of 2 gallons of emulsion per 10 linear feet of footing. Where this treatment is necessary, access holes must be drilled below the sill plate and should be through a lower mortar joint. Before treatment through basement walls, seal the interior wall and floor expansion joint with mortar, caulk, waterproofing material, or similar impervious sealant. Also, seal openings at the top of the foundation wall. Do not treat in this matter through voids in walls constructed on interior slabs such as basement floors.

When treating behind veneer, care should be taken not to drill beyond the veneer. If concrete blocks are behind the veneer, both the blocks and the veneer may be drilled and treated at the same time.

**BASEMENTS:** Apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth from the grade to the top of the footing. For example a footing 3 feet deep would require 12 gallons of emulsion per 10 linear feet. Application shall be made by subslab injection, trenching and/or rodding.

**Inside:** Treatment may be required along inside of foundation walls and along one side of interior partition walls (or bearing walls) especially where the wall is connected by fixtures inserted in the floor. Application may also be necessary around sewer pipes, floor drains, conduits, or any cracks in the basement floor. Drill holes should be spaced in a manner that will allow for application of a continuous chemical barrier. **NOTE** Sandy soils will tend to give less lateral dispersion than clay soils. Spacing should be determined by soil type.

**Outside Perimeter:** Applications must be made by rodding and/or trenching. When rodding from grade or from the bottom of a shallow trench, rod holes should be spaced in a manner that will allow for application of a continuous chemical barrier. Rod holes should not extend beneath the top of the footings.

A trench need not be wider than 6 inches. Rod from the base of a shallow trench to the top of the footings. Low-pressure spray (not exceeding 25 p.s.i.) may be used to treat soil which

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will be replaced in the trench. Mix the emulsion with the soil as it is being replaced in the trench.

**ACCESSIBLE CRAWL SPACES:** Apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth from the grade to the top of the footing. For best results application should be made by rodding and/or trenching.

Treat both sides of foundation and around all piers and pipes. When rodding from grade or from the bottom of a shallow trench, rod holes should be spaced in a manner that will allow for application of a continuous chemical barrier. Rod holes should not extend beneath the top of the footings.

A trench need not be wider than 6 inches. Rod from the base of a shallow trench to the top of the footings. Low-pressure spray may (not exceeding 25 p.s.i.) be used to treat soil which will be replaced in the trench. Mix the emulsion with the soil as it is being replaced in the trench.

To prevent subterranean termites from constructing tubes from soil to crawl space wood members above, an overall soil treatment of this product may be applied. Remove all cellulose debris before application of 1 gallon per 10 square feet overall. Use fans to exhaust crawl space air when working in a confined space. Wear appropriate protective clothing, gloves, and unvented goggles. Keep children and pets out of treated area in crawl space until surface is dry.

When treating plenums or crawl spaces, turn off the air circulation system of the structure until application-generated dust or spray mist has settled.

**INACCESSIBLE CRAWL SPACES:** Inaccessible crawl spaces are those in which the interior clearance prohibits entry and treatment by the applicator. The following methods of treatment may be used:

- Excavation of the crawl space to make it accessible space, then treat as an accessible space.
- Drill through the foundation wall or through the floor above and treat the soil perimeter at a rate of 4 gallons of emulsion per 10 linear feet per foot of soil depth.\*
- Apply to the soil surface of the crawl space with a coarse fan spray with pressures not exceeding 25 p.s.i. at the nozzle. Apply at the rate of 1 gallon of emulsion per 10 square feet.\*

\*NOTE: Children and pets should be kept out of treated area until surface is dry.

If adequate ventilation is not available in the crawl space, wear a respirator approved by the Mine Safety and Health Administration during treatment.

It is recommended that inadequately ventilated crawl spaces be brought into compliance with FHA Minimum Property Standards specifying 1 square foot of ventilated opening per 150 square feet of crawl space area.

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**BATH TRAPS:** Where there is exposed soil beneath and around plumbing/waist pipe entrances through a concrete slab, this soil may be treated with 0.5% emulsion of this product. An access door for inspection and treatment should be cut and installed if not already present. After inspection and removal of any wood (from boards) or cellular debris, treat the soil by rodding and/or flooding with 0.5% emulsion of this product.

### **FOAM APPLICATIONS**

**TORPEDO insecticide emulsion may be converted to a foam and the foam used to treat voids to control or prevent termite, ant, bee, wasp infestations or other arthropods harboring under slabs.**

**Rates:** Use a 0.5% to 2.0% emulsion converted to a foam with expansion characteristics from 2 to 20 times.

**Note:** When using a foaming product be sure that it is compatible with TORPEDO insecticide.

#### **Applications Under Slabs or to Soil in Crawl Spaces:**

- Applications should be made using TORPEDO foam in combination with liquid emulsion applications.
- The total amount of product applied with the combination of foam and liquid emulsion should be equivalent to that of an application using a liquid emulsion only.

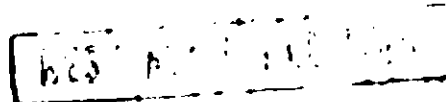
#### **Applications to Other Areas:**

- Applications may be made using either TORPEDO foam alone or in combination with a liquid emulsion.
- Applications may be made behind veneers, piers (concrete or wood), chimney bases, into rubble foundations, into block voids, structural voids (i.e., between stud walls), poles, stumps, and wood in crawl spaces.
- Applications may be made in other areas, which include but are not limited to:
  - Foundations penetrated by utility services.
  - Cracks and expansion joints.
  - Bath traps.
  - Areas where cement constructions have been poured adjacent to the foundation such as stairs, patios and slab additions.

### **POSTS, POLES AND OTHER CONSTRUCTIONS**

Application may be made to create a chemical barrier in the soil around wooden construction such as signs and landscape ornamentation by applying a 0.5% to 1.0% emulsion. Treat on all sides to create a continuous barrier around posts and poles.

Use 1 gallon of emulsion per foot of depth for poles and posts less than six inches in diameter. For larger poles, use 1½ gallons of emulsion per foot of depth. For large constructions, use 4 gallons per linear feet per foot of depth.



For treatments made during installation, the emulsion may be applied to the soil as it is replaced around the pole or post. Previously installed poles and posts may be treated by subsurface injection or treated by gravity-flow through holes made from the bottom of a trench around the pole or post. Treat on all sides to create a continuous chemical barrier. Apply to a depth of six inches below the bottom of the wood.

**EXCAVATION TECHNIQUE:** If treatment must be made in difficult situations such as near wells or cisterns, along faulty foundation walls, and around pipes and utility lines which lead downward from the structure, application may be made in the following manner:

1. Trench and remove soil to be treated onto heavy plastic sheeting or similar material.
2. Treat the soil at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth of the trench. Mix the emulsion thoroughly into the soil taking care to prevent liquid from running off the liner.
3. After the treated soil has dried adequately, replace the soil in the trench.

Prior to using this technique near wells or cisterns consult State, local or Federal regulatory agencies for information regarding approved treatment practices in your area.

**AFTER TREATMENT:** Before leaving the job site, securely plug all holes drilled in construction elements of commonly occupied areas of structures, including unfinished basements, enclosed porches, garages, and workshops.

### **UNDERGROUND SERVICES**

Examples of underground services are wires, cables, utility lines, pipes and conduits. Services may be within structures or located outside structures, in right-of-ways or to protect long range (miles) or installations of services.

Soil treatment may be made using a 0.5% to 1% TORPEDO emulsion to prevent attack by termites and ants.

Apply 2 to 4 gallons of emulsion per 10 linear feet to the bottom of the trench and allow to soak into the soil. Lay services on the treated soil and cover with approximately 2 inches of fill soil. Apply another 2 to 4 gallons per 10 linear feet over the soil surface to complete the treatment barrier. In wide trenches, only treat the soil in the area near the service. It is important to establish a continuous barrier of treated soil surrounding the services.

Where soil conditions will not accept application of specified volume of 0.5% emulsion, the 1% emulsion may be applied at one-half the application rate or 2 gallons per 10 linear feet.

Finish filling the trench with untreated fill soil. The soil where each service protrudes from the ground may be treated by trenching/rodding of no more than 1 to 2 gallons of emulsion into the soil.

**Precaution:** Do not treat electrically-active underground services.

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## RETREATMENT

Retreatment for subterranean termites should be made when there is evidence of reinfestation subsequent to the initial treatment, or there has been a disruption of the chemical barrier in the soil due to construction, excavations, landscaping, etc. Retreatment should be made as a spot application to these areas.

If 0.5% rate is used, the property should be inspected annually for possible reinfestation and retreatment if necessary.

Retreatment may be made to vulnerable areas in accordance with the application techniques described above. This application should be made as a spot treatment to these areas. Routine or annual retreatment of the entire premises should be avoided.

## TREATMENT OF WOOD IN PLACE FOR CONTROL OF TERMITES

(Localized areas in Structures) In addition to subsurface applications, this product may be used for treating infested wood in place. It can be applied to wood by crack and crevice tool, coarse fan spray or injection. Overall broadcast spray applications must be limited to attics, crawl spaces, unfinished basements and similar generally unoccupied areas. In occupied indoor areas, treat wood trim and exposed beams by brush or coarse spray directed only onto the wood to be treated.

**TERMITES ABOVE GROUND:** For control of termites, subterranean aerial colonies, Formosan aerial colonies, or drywood termites in localized areas of infested wood in structures, apply a 0.25% emulsion to voids and galleries in damaged wood and in spaces between wooden members of a structure and between wood and foundations where wood is vulnerable. Application may be made to inaccessible areas by drilling, and then injecting emulsion with a crack and crevice injector into the damaged wood or void spaces. Application to attics, crawl spaces, unfinished basements, or man-made voids may be made with a coarse fan spray of 0.25% emulsion to control workers and winged reproductive forms of termites in mud shelter tubes. This type of application is not intended to be a substitute for soil treatment or mechanical alteration to control subterranean termites, or fumigation for extensive infestation of drywood termites or other wood-infesting insects.

For termites active inside trees, utility poles and/or fence posts, drill to find the interior infested cavity and inject 0.25% emulsion using treatment tool with a splashback guard.

Termite carton nests in trees or building voids may be injected with 0.5% emulsion using a pointed injection tool. Multiple injection points to varying depths may be necessary. It is desirable to physically remove carton nest material from building voids when such nests are found.

**Mixing Information:** For wood in place and above-ground treatments, use a 0.25% concentration. To prepare a 0.25% emulsion, add 1.3 fluid ounces of TORPEDO to 1 gallon of water. To prepare 50 gallons of emulsion, add 0.5 gallons (2 quarts) of TORPEDO to 49.50 gallons of water. To prepare 100 gallons of emulsion, add 1 gallon of TORPEDO to 99 gallons of water. Use this spray at a rate of 1 gallon of diluted spray per 1,000 square feet of surface area.

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**IMPORTANT:** Do not apply emulsion until location of heat pipes, ducts, water and sewer lines and electrical conduits are known and identified. Caution must be taken to avoid puncturing and injection into these structural elements. Do not apply into electrical fixtures, switches, or sockets.

In the home all food processing surfaces and utensils in the treatment area should be covered during treatment or thoroughly washed before reuse. Remove pets, birds, and cover aquariums before spraying indoors. Do not permit humans or pets to contact treated surfaces until the spray has dried.

During any overhead applications to overhead interior areas of structures, cover surfaces below with plastic sheeting or similar materials.

### **ADDITIONAL USE APPLICATIONS**

**CONTROL OF BEES AND WASPS INDOORS:** To control bees, wasps, hornets and yellow jackets, apply a 0.5% emulsion. Application should be in late evening when insects are at rest. Spray liberally into hiding and breeding places, especially under attic rafters, contracting as many insects as possible. Repeat as necessary.

**CONTROL OF BEES AND WASPS OUTDOORS:** To control bees, wasps, hornets, and yellow jackets, apply a 0.5% emulsion. Application should be made in late evening when insects are at rest. Aim spray at nest openings in ground, bushes, and in cracks and crevices which may harbor nests, saturating nest openings and contacting as many insects as possible.

### **RECOMMENDATION FOR CONTROL OF CLUSTER FLY**

Apply TORPEDO to the outside of the structure. Mix 1 part TORPEDO to 5 parts deodorized lightweight mineral oil; apply to 1,000 square feet of wall area. Use a fogging apparatus which delivers the material in a strong air carrier, producing a small particle size. The apparatus should be held within three feet of the surface being treated. Apply only when air movement is less than 2 miles per hour.

The surface treated should be dry at the time of application. Attics and unoccupied lofts should be treated at the same time and at the same rate.

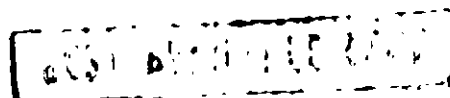
Generally the north side of structures need not be treated since flies seldom enter from areas of sunlight.

### **GENERAL INFORMATION FOR CONTROL OF WOOD-INFESTING INSECTS AND NUISANCE PESTS OUTSIDE OF STRUCTURES**

TORPEDO insecticide may be diluted with water for use to control pests in and around homes and other structures. Pests controlled are listed in the following tables.

#### **UNDER SLABS**

Infestations of Arthropods, such as ants, cockroaches and scorpions inhabiting under slab area may be controlled by drilling and injecting or horizontal rodding and then injecting 1.



gallon of a 0.5% to 1% emulsion per 10 square feet or 2 gallons of emulsion per 10 linear feet.

### **IN CRAWL SPACES**

Broadcast TORPEDO at 0.5% to 1% to all surfaces in crawl spaces to control ants, fleas, cockroaches, scorpions, or other arthropods. Product may also be applied through under-structure insecticidal delivery systems such as piping or flexible tubing mounted under the structure. This treatment is not intended as a substitute for termite control. Treat surfaces to point of runoff. Keep children and pets off surface until dry.

### **OUTSIDE SURFACES AND AROUND BUILDINGS**

Apply TORPEDO using a 0.5% emulsion as a residual spray to outside surfaces of buildings including, but not limited to, exterior siding, foundations, porches, window frames, eaves, patios, garages, refuse dumps, residential lawns only such as grass areas adjacent or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, fence lines, storage sheds, barns, and other residential and non-commercial structures, soil, trunks of woody ornamentals and other areas where pests congregate or have been seen. Repeat treatment as necessary to maintain effectiveness.

Keep children and pets off treated areas until dry.

**BARRIER TREATMENT:** Apply 0.5% to a band of soil and vegetation 6 to 10 feet wide around and adjacent to the structure. Also, treat the foundation of the structure to a height of 2 to 3 feet. Use a spray volume of 2 to 10 gallons per 1,000 square feet. Higher volumes of water may be needed if mulch or leaf litter is present or dense foliage. House siding may be treated if pests such as Gypsy moth adults and caterpillars, boxelder bugs, elm leaf beetles, earwigs or silverfish are present.

PEST	SPECIFIC INSTRUCTIONS			
Ants Ant Mounds <sup>1</sup> Fireants <sup>1</sup> Bark Beetles <sup>3</sup> Bees Carpenter Bees Borers <sup>3</sup> Boxelder Bugs <sup>2</sup> Centipedes Cockroaches Asian Cockroaches Crickets Mole Crickets Earwigs Elm Leaf Beetles <sup>2</sup> Firebrats Fleas <sup>4</sup> Ground Beetles Gypsy Moths (adult & Caterpillars) <sup>2</sup> Millipedes Scorpions Silverfish Sowbugs Spiders Wasps Ticks <sup>4</sup> Flies Carpenter Ants Chinchbugs Pill Bugs	Apply as a pinstream, as a fine/course, low pressure spray (20 psi or less), as a spot treatment or with a paintbrush. Treat where pests are found or entry points of the structure such as window and door frames and along the foundation.  <sup>1</sup> Drench Method: Apply 1-2 gallons of emulsion to each mound area by sprinkling the mound until it is wet and treat a 4 foot diameter circle around the mound. Use the higher volume for mounds larger than 12". For best results, apply in cool weather, such as in early morning or late evening hours, but not in the heat of the day.  <sup>2</sup> Boxelder Bugs, Elm Leaf Beetles, Gypsy Moth Caterpillars: Spray tree trunks, building siding or wherever pests congregate, to the point of runoff.  <sup>3</sup> Borers and Bark Beetles: To prevent infestation of trees and woody ornamentals, spray the bark to the point of runoff.  <sup>4</sup> Fleas: Mix 2.5-5.0 oz. of TORPEDO in 16 to 100 gallons of water and apply to 4,000 square feet of lawn. Use the lower rate to knock down existing fleas and the higher rate where faster knockdown or greater residual is desired. For example:			
	LAWN	SQ. FT.	OZ. OF TORPEDO	GALS. OF WATER
	Small	2,000	1.25 to 2.50	8 to 50
		4,000	2.50 to 5.00	16 to 100
	Medium	6,000	3.75 to 7.50	24 to 150
	Large	12,000	7.50 to 15.0	48 to 300
	1 Acre	44,000	20.8 to 41.6	176 to 1,100
	Lawn should not be longer than 3 inches at the time of application. Repeat application if necessary. Application in combination with compatible surfactants may enhance penetration. Arid climates generally require the higher volume.			

## **GENERAL PRECAUTIONS AND RESTRICTIONS**

Do not use in food or feed areas of food handling establishments, restaurants or other areas where food or feed is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared food are served such a dining rooms but excluding areas where food may be prepared or held.

Nonfood/feed areas are areas such as garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage (after bottling or canning).

Not for use in USDA meat and poultry plants.

### **DO NOT APPLY THIS PRODUCT TO EDIBLE CROPS.**

Do not apply in warehouses were raw or cured tobacco is stored.

Do not apply in warehouses while raw agriculture commodities for food or feed are being stored.

Do not apply in greenhouses where crops for food or feed are grown.

Do not apply to pets, crops, firewood or sources of electricity.

Do not allow people or pets on treated surfaces until the spray has dried.

Do not use concentrate or emulsion in fogging equipment.

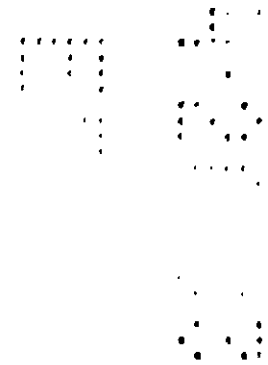
During indoor surface application, do not allow dripping or run-off to occur.

Do not apply this product in patient rooms or any rooms while occupied by the elderly or infirm.

Do not apply to classrooms when in use.

Do not touch treated surface until dry.

When applying TORPEDO in a confined area, the user should wear protective clothing, unvented goggles, rubber gloves, and a respirator approved by the Mine Safety and Health Administration during application.





**SPRAY DILUTIONS\***

<b>CONCENTRATION OF A.I.</b>	<b>AMOUNT OF TORPEDO</b>	<b>AMOUNT OF WATER</b>
0.25%	1.3 fl. oz.	1 gal.
0.25%	2 qts.	49.5 gals.
0.25%	1 gal.	99 gals.
0.50%	2 gals.	98 gals.
1.0%	4 gals.	98 gals.
2.0%	10.4 fl. oz.	1 gal.
2.0%	8 gals.	98 gals.

\*Fill sprayer with the desired volume of water and add TORPEDO™ Insecticide. Close spray container and shake or agitate before use to ensure proper mixing. Make up diluted material only as required.

## STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

**STORAGE:** Keep container closed when not in use. Do not store near food or feed. Protect from freezing. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

**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.

### CONTAINER DISPOSAL:

**Metal Containers:** 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 Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or 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.

**Refillable Return Containers:** Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning.

**Container Precautions:** Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

**REFILL ONLY WITH TORPEDO Insecticide.** The contents of this container cannot be completely removed by cleaning. Refilling with materials other than TORPEDO Insecticide will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking containers.

**CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER!**

**IMPORTANT:** Read the Entire Directions for Use and the Conditions of Sale and Warranty before using this product.

**CONDITIONS OF SALE AND LIMITED WARRANTY:**

The Directions for Use of this product are believed to be reliable and should be followed carefully. However, 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 timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY.

When Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories), Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. The EXCLUSIVE REMEDY OF BUYER OR USER and the LIMIT OF LIABILITY of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

TORPEDO™ is a trademark of an ICI Group Company.