## Debug® ON neem oil formulation

**Emulsifiable Concentrate Antifeedant, Insect Repellent, Insecticide, Miticide, Fungicide & Nematicide**

**ACTIVE INGREDIENT:**
- Oils of Neem: 70.00%

**OTHER INGREDIENTS:**
- 30.00%

**TOTAL:**
- 100.00%

5.3 LBS (2403 Grams) Active Ingredient Per Gallon of Product

**SHAKE THIS CONTAINER WELL BEFORE USE**

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

### FIRST AID

<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>On skin or clothing</td>
<td>- Take off contaminated clothing, rinse skin immediately with plenty of water for 15-20 minutes</td>
</tr>
<tr>
<td>If inhaled</td>
<td>- Move person to fresh air, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible</td>
</tr>
</tbody>
</table>

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30AM to 4:30PM Pacific Time (NPIC Web Site: www.npic.orst.edu).

**Net contents:** 2.5 Gallons

**MANUFACTURED FOR:** Agro Logistic Systems, Inc.

P.O. Box 5799, Diamond Bar, CA 91765, U.S.A. TEL: (714) 990-9220 Website: www.agrologistic.com

**EPA REGISTRATION No. 70310-11**

**EPA ESTABLISHMENT No. 92815-IND-001**
PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
Harmful if absorbed through skin or if inhaled. Causes moderate eye irritation. Avoid breathing spray. Avoid contact with skin, eyes or
clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
Remove and wash contaminated clothing before reuse.
Personal Protective Equipment (PPE)
Applicators, Mixers and other handlers must wear
- Coveralls
- Socks, shoes, and
- Chemical resistant gloves.
Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables use detergent and hot water. Keep
and wash PPE separately from other laundry
USER SAFETY RECOMMENDATIONS
Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove
PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change
into clean clothing.
ENVIRONMENTAL HAZARDS
For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high
water mark. Do not contaminate water when disposing of equipment washwater or rinsate. This product is toxic to fish and aquatic
invertebrates. Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas.
DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personnel protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours. PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil or water is:

- Coveralls
- Chemical resistant gloves, such as barrier laminates or butyl rubber or nitrile rubber or PVC.
- Shoes and socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used on agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of treated areas until sprays have dried.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep in original packaging in cool and dry place (between 60 degrees F and 80 degrees F) away from sunlight and foodstuffs. Do not refrigerate. For Commercial Agricultural Use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable Container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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 puncture or dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances.
DEBUG-ON

PLEASE READ THE FOLLOWING INFORMATION CAREFULLY BEFORE USING DEBUG-ON

TANK MIXING:

'DEBUG ON' is compatible with commonly used insecticides, fungicides and foliar fertilizers. Do not use Debug Turbo with Bordeaux mixture, lime sulfur or other highly alkaline materials. It is advisable to pre-test the tank mix combination proposed on a few plants to observe phytotoxicity, if any. The climatic conditions and cultural practices may be different in the actual field than experimental conditions. This product is damaged by oxidants. Do not mix acids and bleaches with DEBUG ON.

1. Determine the acreage to be treated with DEBUG ON.
2. Rill tank with appropriate amount of water.
3. Add the pre-measured amount of DEBUG ON.
4. Keep tank agitated with an agitation device. Proper agitation is required, especially when mixing DEBUG ON with other pesticides.

MIXING DIRECTIONS:

SPRAYING DIRECTIONS:

Spray DEBUG ON using a boom system, propeller turbine system (indicated for orchards); pressure hose with gun sprayers, powered back sprayers and manual hand sprayers. Use a minimum boom pressure of 160 psi and maximum tractor speed of 7.0 miles per hour. Use horizontal nozzles at 10-inch spacing and two vertical drops, one at each end. Each vertical drop must have two nozzles, one at 90-degree angle and the other at 45-degree angle. The water used for mixing should have a pH at about 5.5 for DEBUG ON to be most effective. If necessary, use a buffer to bring the pH to the desired level.

1. DURING APPLICATION, MAKE SURE THAT THE SPRAY COVERS THE ENTIRE PLANT INCLUDING THE UNDERSIDE OF LEAVES.

2. AERIAL APPLICATIONS: DEBUG ON may be aerially applied using suitable equipment such as fixed-wing aircraft or helicopters.

CHEMGICATION DIRECTIONS

GENERAL CHEMGICATION REQUIREMENTS:
A. "Apply this product only through sprinkler, or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system."
B. "Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water."
C. "If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts."
D. "Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place."
E. "A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise."

SPRINKLER CHEMGICATION REQUIREMENTS:
1. 'The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.'
2. 'The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.'
3. 'The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.'
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. 5. Do not apply when wind speed favors drift beyond the area intended for treatment. 6. Agitation is generally recommended in the pesticide supply tank. 7. Apply this product continuously for the duration of the water application. 8. A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate 5.0 Gallons per 500 gallons of water. 9. Apply between 1200 to 1500 gallons of water per acre to achieve efficacy.

**DRIP (TRICKLE) CHEMIGATION REQUIREMENTS:**

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 5. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. 7. Agitation is generally recommended in the pesticide supply tank. 8. A supply tank is recommended for this product. If using a supply tank, dilute this product at the rate of 5.00 Gallons per 500 gallons of water. 9. Apply between 1200 to 1500 gallons of water per acre to achieve efficacy.

For Golf Courses, Turf, Parks & Ornamentals

**NEMATODE, AND TURF INSECT CONTROL**

For Organic Turf Use: Controls many insects including:
- Red ants, Cutworms, Grubs, Chinch bugs, Crickets, Aphids, Whiteflies, Thrips, Beetles, Leafhoppers, Fruit worms, Spider mites, Caterpillars, Cabbage loops, Armyworms, Colorado potato beetles, Diamondback moths, Grasshoppers, Maggots, Weevils, Chafers, Spider Mites,
- Spittlebugs, Webworms, Rhizoctonia solani, Sclerotium rolfsii, Sclerotinia sclerotiorum, Fusarium oxysporum, Rust, and Powdery Mildew,
- Pythium

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- Cabbage loops, Armyworms, Colorado potato beetles, Diamondback moths, Grasshoppers, Maggots, Weevils, Chafers, Spider Mites,
- Spittlebugs, Webworms, Rhizoctonia solani, Sclerotium rolfsii, Sclerotinia sclerotiorum, Fusarium oxysporum, Rust, and Powdery Mildew,
- Pythium
DIRECTIONS FOR USE

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

1. SHAKE THIS CONTAINER WELL BEFORE USE.
2. FOR INSECT AND WORM CONTROL (see above list):
   MIX 2 TO 10 FL. OZ. OF DEBUG ON IN 2 TO 3 GALLONS OF WATER (or 96 FL. OZ. to 500 FL. OZ. of Debug Turbo with 100 gallons water per acre). Ensure that pH of this mixture is around 5.5 by using a buffer. Spray the mixture on to 1000 square feet of turf. Using sprinklers or other means, deliver additional amounts of water to push the material to ¼ inch - ½ inch below ground level. For worm and insect control apply at the earliest sign of infestation. Repeat the application at 7-10 days interval if infestation persists.
3. SPRAY DEBUG-ON IN THE EARLY MORNING OR LATE AFTERNOON.
4. USE ALL OF THE DILUTED MATERIAL SOON AFTER MIXING. DO NOT SAVE MIXED MATERIAL.
5. USE AS A PREVENTATIVE TO KEEP INSECTS AWAY.

GENERAL:
• DEBUG ON is more effective when used as a preventative.
• DEBUG ON is a broad-spectrum herbal insecticide.
• DEBUG ON affects the insects at all stages of growth.
• IF GELLING OCCURS, WARM IT TO ROOM TEMPERATURE BEFORE APPLICATION.

WARRANTY:
AGRO LOGISTIC SYSTEMS, INC. warrants that material contained herein conforms to the description on the label and is reasonably useful for the purposes referred to in the directions for use. Method of application and timing, weather, cultural practices, insect problem, crop condition, and incompatibility with other chemicals not specifically recommended in the use of this product are beyond the control of the seller. It is the manufacturer’s intention that the buyer assumes risk of use, storage or handling of this material not in strict accordance with directions given herein.
AGRICULTURAL, HORTICULTURAL, AND GREENHOUSE USE

CRPES
Top fruits including but not limited to: Citrus, Lemuvs, Orchards, Grapefruits, Pummao,
Apples, Pears, Peaches, Apricots, Almonds, Yeas, Prunes, Nectaries, Pears, Mangos,
Figues, Kiiifruit, Kiwiapples, Loquats, Quince, Persimmons, and Plums.

Cucumbers, Watermelons, Cherries, Squashes, Pumpkins, Gourds, Bitter melons,
Chayotes, Olives, Arariguanos, and Melons.

Bulb, Cole and Leafy vegetables including but not limited to: Broccoli, Brussels sprouts,
cabbage, cauliflower, Collard, Lettuce, Endives, Kale, Parsley, Orinons, Cilantro, Shallots,
Leks, Kolokoi, Chest, Collard, Ararideth, Radicchio, Chicory, Mustard Greens,
Rapeseed, Mizuna, Arugula, and Spinach.

Root and Tuber vegetables including but not limited to: Beets, Carrots, Ginger, Radish,
Horseradish, Potatoes, Turnips, Yams, Sweet Potatoes, Ginseng, Rutabagas,
Watercress, Artichokes and Turmeric.

Legumes including but not limited to: Beans, Lentils, Peas, Peanuts, Soybeans and
Garbanzo Beans.

Cereals including but not limited to: Barley, Corn, Millet, Rice, Rye, Sorghum, Tribale,
Dats, and Wheat.

Alfalfa and other feed & forage crops, Grasses, Fruiting vegetables including but not
limited to: Tomatoes, Tomatillos, Bell Peppers, Chili Peppers, and Eggplant. Berries
including but not limited to: Blackberries, Blueberries, Currants, Strawberries, cane
berries, Goosberries, Raspberries, Cranberries, Loganberries, Huckleberries, and
boysenberries. Grapes. Tropical fruits including but not limited to: Bananas, Cherries,
Mangos, Guavas, Papayas and Pineapples.

Cotton and oilseeds including but not limited to: canola, Sesame, Rapeseed, Sunflower,
Safflower, Olive, Peanut and Jojoba Herbs & Soce including but not limited to: Mint,
Anise, Basil, Chives, Coriander, Dill, Fennel, Marjorpc, Sage, and Thyme.

Mushrooms, including but not limited to: Agaricus, Bella, Forder, Macrole, Oyster,
Shitake, and other specialty mushrooms. Nuts including but not limited to: Almonds,
Peccns, Pistachios, cashews, Chestnuts, Macadamia, Hazelnut, Brazil nut, Water

Greenhouse Crops and Ornamentals including but not limited to: Chrysanthemums,
Potosities; Roses, Lilies, Geraniums, Daisies, coneflowers, Salvia and Begonias. All
 Starter Vegetable and fruit Crops.

INSECT PESTS/mites/DISEASES/NEMATODES

Aphids
Armyworms
Beetles, Beanleaf Beetles, cucumber Beetles, Japanese Beetles, Mexican Beetles,
Colorado Potato Beetles, Potato Flea beetles, Corn beetles, Flea Beetles Borer,
Budworms
Grasshoppers, caterpillars, Clothing Moth
Fruit Flies
Fungus Gnats, Grasshoppers, Grubs
Leaffoppers, Leaf Perforators, Leafminers, Loopers, Looper, cabbage
Maggots, Onion Maggots, Mayfly bugs
Millers, Rust and Powdery Mildey, Millers, Two Spotted Spidermites, Pacific Spider
Mites
Moths, Diamondback Moths, Gypsy Moths, Grape Berry Moths, Nematodes
Orange Ticks
Physcom, Phytol, Pyra, Pyralis
Rhodone, Solen
Scales, San Jose Scale
Sclerotium Rolfsis
Sclerotinia rolfsis
Shoo Shooters
Sucker Ants
Thrips
Weevils, Pepper Weevil, Boll weevils
Whitelines
Wine
Wireworms
Boil Worms
Budworms
Aphids Worms
Boll Worms
Rice Worms
Root Worms, Root Worms, Ear Worms, Cut Worms
DIRECTIONS FOR CROP APPLICATIONS
STANDARD APPLICATION: ALL APPLICATION RATES ARE FOR ONE ACRE

56 fl. oz to 364 fl. oz. of Debug-ON mixed with 100 gallons water or sufficient amount of water to ensure total foliar coverage. When applying in high population crops like berries and fruit trees, use dilution of 96 fl. oz. to 640 fl. oz. of Debug-ON with 150 to 300 gallons of water. Repeat application at 7 to 14 day intervals, at least once and if necessary additional times.

For Greenhouse crops Prepare a 1.0% - 3% (1.25 oz.- 3.75 oz. / Ga) solution of Debug-ON in water and completely drench the plants. Repeat every 5 to 7 days till infestation clear.

WE RECOMMEND USING DEBUG TURBO AS PREVENTATIVE APPLICATION EVEN IF THERE IS NO INFESTATION

Start applying when the plants are tall enough to be susceptible to infestation. Use the following:

- For Baby Vegetables, apply 10 days after planting and repeat again in 7 to 10 days.
- For Regular Vegetables, apply when the plant has grown two leaves or is 6 inches tall. Repeat application every 10 to 15 days.
- For Fruit Trees, apply when the tree ends dormancy and continue to repeat applications every 10 to 15 days.
- For Berries, apply when the plant ends dormancy and continue to repeat applications every 10 to 15 days.
- For Grasses and Forage Crops like Alfalfa, apply in spring, approximately 2 weeks after dormancy period is over, and repeat every 10 to 15 days.

FATS, AND GLYCERIDIC OILS MARGOSA (NEEM OIL) IS EXEMPT FROM THE REQUIREMENT OF A TOLERANCE AS PER 40 CFR 180.1291. THERE IS NO LIMIT ON THE NUMBER OF APPLICATIONS.
Emulsifiable Concentrate Antifeedant, Insect Repellent, Insecticide, Miticide, Fungicide & Nematicide

ACTIVE INGREDIENT:
Fats and Glycerides 70.00%
Oils of Margosa 30.00%

OTHER INGREDIENTS:
TOTAL: 100.00%

5.3 LBS (2403 GRAMS) ACTIVE INGREDIENT PER GALLON OF PRODUCT

SHAKE THIS CONTAINER WELL BEFORE USE
KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

If on skin
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

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.
- Call a poison control center or doctor for further treatment advice.

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