

84185-4

10/15/2009

4/9



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Avenue NW
Washington, DC 20460

EPA Reg. Number:
84185-4

Date of Issuance:
10-15-09

Term of Issuance: **Unconditional**

Name of Pesticide Product:
**Plasma Neem® Oil
(Azadirachtin 3000 ppm)
Biological Insecticide**

NOTICE OF PESTICIDE:
 Registration
 Reregistration
(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

**Plasma Power Private Limited of India
c/o OMC Ag Consulting, Inc.
828 Tanglewood Lane
East Lansing, MI 48823**

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) for a period of one year from the date of registration. This registration will expire on October 14, 2010. You are required to:

1. Submit and/or cite all data required for registration/ re-registration of your product under FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants of similar products to submit such data.
2. Revise the EPA Registration Number to read, "EPA Reg. No. 84185-4."
3. Submit three (3) copies of the revised final printed labeling before you release the product for shipment.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

Date:

15 October 2009

Keith A. Matthews, Acting Director,
Biopesticides and Pollution Prevention Division

Plasma Neem[®] Oil (azadirachtin 3000 ppm) BIOLOGICAL INSECTICIDE

Anti-Feedant, Insect Repellent, Insect Growth Regulator

*For Non-Crop and Crop Uses
including vegetables, fruits, nuts, and ornamental plants*



Active Ingredient:

Cold Pressed Neem Oil* 100.0%

Other Ingredients..... 0.0%

Total 100.0%

* Contains 0.02503 lb. azadirachtin per gallon (azadirachtin 3000 ppm)

KEEP OUT OF REACH OF CHILDREN CAUTION

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

If you do not understand the label, find someone to explain it to you in detail (Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.)

NET CONTENTS 8 Oz, 1 Qt, 1, 2½, 5 or 55 GALLONS

EPA Reg. No. 84185 - 4

EPA Est. No. 84185 -XX -YYYY

Manufactured by:
Plasma Power Private Limited
J-12 (New #23), 6th Avenue, Anna Nagar
Chennai 600 102
India

Tel: +91-44-26224503 / 26260485
Fax: 1-800-859-7115 (Toll free) / +91-44-26268609

Email: arun@plasmaneem.com
Website: <http://www.plasmaneem.com>

ACCEPTED
OCT 15 2009

Under the Federal Insecticide, Fungicide
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. **84185-4**

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco..

Route of Entry	First Aid
If inhaled	Move the person to fresh air. If person is not breathing, call 911 or an ambulance and then give artificial respiration, preferably mouth-to-mouth if possible. Call a doctor or poison control center for treatment advice..
If on skin or clothing	Remove contaminated clothing. Rinse skin immediately with plenty of water for about 15 minutes. Call a doctor or poison control center for treatment advice.
If in eyes	Hold eye open and rinse slowly and gently with water for about 15 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes. Call a doctor or poison control center for treatment advice.
If swallowed	Call a poison control center or doctor immediately for treatment. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless instructed .to do so by a poison control center or doctor.
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL TOLL FREE 1-800-859-7115</p>	

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical resistant gloves
- Shoes with socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions are available, wash with detergent and hot water. Keep and store PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40CFR170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS. **IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water bodies. Do not contaminate water when cleaning equipment or disposing wash water. 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

USER SAFETY RECOMMENDATIONS

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if contaminated with pesticide. Wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS. 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 product application. For any requirements specific to your state or tribe, consult the state or tribal agency responsible for pesticide regulation.

5/9

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 personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Do not enter or allow entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to 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
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

These requirements apply to uses of this product that are NOT within the scope of the WPS for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. For other uses, including golf courses and other non-agricultural uses, do not enter treated areas without protective clothing until sprays have dried

PRODUCT MODE OF ACTION

Plasma Neem® Oil (3000 ppm azadirachtin) controls target pests primarily by ingestion and also by contact. The modes of action are repellence, anti-feeding action and interference with the molting process.

GENERAL INFORMATION

Read all directions before using this product.

Apply **Plasma Neem® Oil (3000 ppm azadirachtin)** as directed to any food or non-food crop up to and including the day of harvest, at a maximum rate of 3½ pints **Plasma Neem® Oil** /acre (emulsified by using at least 11 fl. oz. of surfactant). In most cases, use a concentration of 0.5% **Plasma Neem® Oil** in water plus surfactant. In case of severe infestation or for aerial application, use a 1.1% concentration. Do not use a concentration above 1.1% **Plasma Neem® Oil**. Refer to the Mixing and Application Instructions for mixing and rate instructions, and to Use Site Section for a complete listing of crops.

6/9

MIXING

Plasma Neem® Oil (3000 ppm azadirachtin) is pure neem oil and requires a surfactant, such as organic soap, dish washing fluid, for dilution with water. Note: Plasma Neem® Oil must be diluted with water and a surfactant in order to form a spray able emulsion.

- Use a concentration of 0.5% (1 part of Plasma Neem® Oil to approximately 200 parts of water).
- In cases of severe infestation or for aerial spraying applications, the concentration of Plasma Neem® Oil can be increased to 1.1% (1.1 parts of Plasma Neem® Oil to approximately 100 parts of water). Do not use a concentration above 1.1% Plasma Neem Oil.
- Do not attempt application without adding adequate quantity of surfactant as improper emulsification will result in phyto toxicity.

Add the surfactant, such as organic soap, and **Plasma Neem® Oil (3000 ppm azadirachtin)** to a mixing tank, and stir. The ratio of surfactant to **Plasma Neem® Oil (3000 ppm azadirachtin)** must be in the ratio 1:5. For every pint of **Plasma Neem® Oil (3000 ppm azadirachtin)**, use at least 3 fl. oz. of surfactant. Then add water to the spray tank with continuous agitation. Use warm water if ambient temperature is below 60° F.

Applying the product immediately after preparation assures that it is in suspension. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying. Non-uniform mixing can cause crop injury or result in lowered effectiveness. For tank mixtures add components to the tank containing the Plasma Neem® Oil (3000 ppm azadirachtin) spray mixture and agitate thoroughly. If tank mixture is allowed to sit, agitation is necessary prior to application. Adjusting the spray mixture pH between 5.5 and 7 will provide optimal performance. Always use this product promptly after mixing with water and do not let tank mix sit for any extended period.

COMPATIBILITY: Plasma Neem® Oil (3000 ppm azadirachtin) is best applied independently but has been found to be compatible with most tank mixes. **Plasma Neem® Oil (3000 ppm azadirachtin) may not be compatible with deltamethrin formulations such as Decis®.** To avoid problems, conduct a compatibility test before using this product in a tank mix with other pesticides or with fertilizers. To test for compatibility, mix a small amount of each product, in the appropriate proportions, in a small jar.

PHYTOTOXICITY: When used according to label instructions, Plasma Neem® Oil (3000 ppm azadirachtin) has been evaluated for phytotoxicity on a wide range of crops and ornamentals. However, it is recommended that testing of a small portion of the area to be treated for phyto toxicity be conducted before treating the entire area. Further, all possible mixtures of pesticide sprays, other fertilizers, surfactants, adjuvants, have not been tested. Therefore testing for phyto toxicity of spray mixtures is recommended. Spray equipment used to apply Plasma Neem® Oil (3000 ppm azadirachtin) must be thoroughly cleaned before use. Tank mix combinations of **Plasma Neem® Oil (3000 ppm azadirachtin)** may be incompatible with oil-based formulations.

APPLICATION INSTRUCTIONS

Spray when the onset of pests (see Pest List) is expected or soon after pests are noticed. When used as a foliar application, spray Plasma Neem® Oil (3000 ppm azadirachtin) in a suitable high volume sprayer with adequate spray pressure to ensure complete and thorough coverage of the plant surfaces. Ensure that both the top and bottom of leaves are wetted. For optimum results, repeat the applications at intervals of 7-10 days. Use higher rates and increase spray frequency when pest pressure is high. Spray early in the morning or in the evening for best results. Repeat application if it rains within four hours of spraying.

SPRAY DIRECTIONS

Apply Plasma Neem® Oil (3000 ppm azadirachtin) as a foliar spray or as soil drench to control insects. When needed, soil drenches can also be used to control soil borne pests and larvae of pests. When applied as a soil drench, avoid excessive run off. Plasma Neem® Oil (3000 ppm azadirachtin) can also be applied through sub-surface soil treatment equipment. Always follow equipment manufacturer's use directions. Plasma Neem® Oil (3000 ppm azadirachtin) may be applied using any powered or manual pesticide application equipment which includes high volume, low volume, ultra-low volume, electrostatic and fogging. Follow the original manufacturer's instructions when using these types of equipment.

RATES

For most pest and crop conditions, use Plasma Neem® Oil (3000 ppm azadirachtin) at 1-2 pints/acre using a 0.5% concentration of Plasma Neem® Oil (3000 ppm azadirachtin) in water. Use at least 3 – 6 ½ fl. oz. of surfactant for emulsification.

In the case of very heavy pest pressure, use up to 3 pints per acre in a 1.1% concentration of Plasma Neem® Oil (3000 ppm azadirachtin) in water. Use at least 11 fl. oz. of surfactant for emulsification.

When used alone (without fertilizers or other pesticides) for sensitive crops such as lettuce, spinach and asparagus, use 6 fluid ounces per acre of Plasma Neem® Oil (3000 ppm azadirachtin) in a 0.5% concentration of Plasma Neem® Oil (3000 ppm azadirachtin) in water. Use 1 fl. oz. of surfactant for emulsification. The amount of Plasma Neem® Oil (3000 ppm azadirachtin) may be reduced by 50% when tank mixed with other compatible products.

USE SITES

CROP USES – Use Plasma Neem® Oil (3000 ppm azadirachtin) on the following crops:

Alfalfa, Beans, Berries, Bulb Vegetables, Cereal Grains, Citrus fruits, Cole Crops, Cotton, Cucurbits, Fruits, Herbs, Legumes, Leafy and Fruiting Vegetables, Peanuts, Roots and Tubers, Pome and Stone Fruits, Tree Nuts and Tropical Fruits.

NON-CROP USES – Use Plasma Neem® Oil (3000 ppm azadirachtin) on non-crop use sites including: ornamentals, nurseries, and fencerows

PESTS

Plasma Neem® Oil (3000 ppm azadirachtin) may be used against the following pests:

Aphids: (Cotton aphids, Cowpea aphids, Mustard aphids, Okra aphids, Pea aphids, Rice aphids).

Beetles: Brinjal (Egg Plant) Spotted Leaf Beetle, Chick pea beetle, Cow pea beetle, Colorado potato beetle, Cucumber beetle, Mexican Bean beetle, Radish Flea beetle, Red Pumpkin beetle, Spotted cucumber beetle, Soya bean Japanese beetle).

Stink bugs: Tomato stink bugs

Caterpillars: Black headed caterpillar, Cabbage caterpillar, Ear cutting caterpillar, Tobacco caterpillar, Yellow hairy caterpillar

Leafhoppers: Brown plant hopper, Carolina grass hopper, Leaf hopper, Potato leaf hopper, Rice brown plant hopper, Rice grass hopper, Rice green leaf hoppers

Leafminers: Leafminers of ornamental plants, tomato leaf miner.

Whiteflies: Cotton white fly, Sugar cane white fly, Banded wing white flies, citrus white flies

Mealy Bugs: Mealy bugs of ornamental plants

Midges: Brassica pod midge

Mites: Spider Mites

Weevils: Black Vine Weevil

Scales: California red scales, Yellow scales, Coffee green scales

Thrips: Peanut Thrips

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by pesticide storage or disposal.

PESTICIDE STORAGE: Do not store this product above 104°F or below 20°F for extended periods of time. Keep containers tightly closed and in original containers when not in use. Do not store exposed to ultraviolet light (sunlight) or moisture. Neem oil clouds and solidifies at temperatures below 59°F. If oil has solidified, gently thaw by exposing to temperatures over 80°F. Store in such a manner to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Keep container closed when not in use.

PESTICIDAL DISPOSAL: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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.

NOTICE ON CONDITIONS OF SALE

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks 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 Seller. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Seller makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Seller is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Seller disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Seller election, the replacement of product.

Plasma Neem® Oil (3000 ppm azadirachtin) is the registered trademark of Plasma Power Private Limited. Contains Plasma Neem® Oil manufactured by Plasma Power Private Limited, India.