

66222-163

04-02-2008

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**U.S. ENVIRONMENTAL PROTECTION
AGENCY**

**Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460**

EPA Reg. Number:

66222-163

Date of Issuance:

2 APR 2008

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance: **Conditional**

Name of Pesticide Product:

N-Lock Nitrogen Stabilizer

Name and Address of Registrant (include ZIP Code):

**Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Rd., Suite 300
Raleigh, NC 27609**

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration 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 conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) and (B) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Submit within one year of the date of this registration notice, storage stability (830.6317) and corrosion characteristics (830.6320) studies.
3. Make the following label changes:
 - a. Revise the product label by changing the product label nominal concentration from 22.2% to 24.0%, so it agrees with the basic CSF (dated 2/27/08).
 - b. Revise the EPA Registration Number to read, "EPA Reg. No. **66222-163**."
4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Signature of Approving Official:

Joanne I. Miller
Product Manager 23
Herbicide Branch
Registration Division (7505P)

Date:

2 APR 2008

5. Provide the Agency the following information prior to formulating your product:
 - a. The registration number and the establishment number of the manufacturing and technical product from which this product is derived,
 - b. The name and address of the entity from which the manufacturing product was obtained, and
 - c. A copy of the bill of sale.

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.

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

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

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TM

N-LOCK

Nitrogen Stabilizer

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

66222-163

Use to control the nitrification process in the soil and delay nitrification of ammoniacal and urea nitrogen fertilizer compositions.

ACTIVE INGREDIENT:	% BY WT.
Nitrapyrin: 2-chloro-6-(trichloromethyl) pyridine	22.2%
INERT INGREDIENTS:	77.8%
	TOTAL 100.0%

Contains petroleum distillates
Contains 2 pounds of active ingredients per gallon.

EPA Reg. No. 66222-xxx

EPA Est. No.

Manufactured for:
Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Rd., Suite 300
Raleigh, NC 27609

Net Contents: ___ Gallons

KEEP OUT OF REACH OF CHILDREN WARNING-AVISO

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

FIRST AID

IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • 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 IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
IF INHALED:	<ul style="list-style-type: none"> • 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.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Prozar at 1-877-250-9291 for 24-hour emergency medical help.</p> <p>NOTO TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia.</p>	

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

WARNING. Harmful if inhaled, swallowed or absorbed through skin. Causes moderate eye irritation so avoid contact with eyes. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals, therefore avoid contact with skin. Avoid contact with clothing. Avoid breathing vapor or spray mist.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of wastes.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton
- Shoes plus socks
- Protective eyewear

For more options of chemical-resistant materials than those listed above, follow the instructions for category G on an EPA chemical resistance selections chart.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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 [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then 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.

PHYSICAL AND CHEMICAL HAZARDS

Combustible: 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.

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 requirements specific to your State or Tribe, consult the 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 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.

Do not enter or allow entry into treated areas during the restricted entry interval (REI) of **24 hours**.

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, includes:

- Coveralls
- Chemical-resistant gloves such as barrier laminate or Viton
- Shoes plus socks
- Protective eyewear

GENERAL USE INFORMATION AND PRECAUTIONS

Nitrogen fertilizers are required in large quantities for optimum production of many crops including corn, sorghum and wheat. For economic and other reasons, it is very important to prevent the loss of this nitrogen through volatilization, leaching or denitrification. Denitrification is the biochemical reduction of nitrates, under saturated conditions, to nitrogen gases and accounts for the majority of the nitrogen lost in most soils. One way to reduce the conversion of ammonium nitrogen to nitrates is to control the Nitrosomonas bacteria which are required for this reaction to proceed. The use of a nitrification inhibitor like N-LOCK® delays the conversion of ammonium nitrogen to nitrate nitrogen for several weeks by controlling the activity of the soil bacteria.

N-LOCK® nitrogen stabilizer is not a substitute for fertilizer. It is an oil soluble product that may be used with urea fertilizers, anhydrous ammonia and dry ammonium in corn, sorghum and wheat. N-LOCK®, when mixed with a compatibility agent, may be used in the application of aqua ammonia, other liquid ammoniacal or urea nitrogen fertilizer compositions. When liquid or dry ammonium, urea fertilizers or animal wastes are surface applied, N-LOCK® may be mixed with water and a compatibility agent and applied during the incorporation operation.

Chemigation: Do not apply N-LOCK® through any type of irrigation system.

Corrosion Precaution: N-LOCK® is corrosive to aluminum and may affect the operation of pumping, mixing, and application equipment. To minimize corrosion of submerged aluminum parts, especially when N-LOCK® is mixed with anhydrous ammonia, replace all aluminum parts with parts constructed of mild steel or stainless steel materials. Side-mount or end-mount liquid level float gauges containing aluminum should be replaced with stainless and mild steel gauges. To further minimize corrosion of equipment and for maximum effectiveness, do not store anhydrous ammonia containing N-LOCK® longer than 3 weeks. Acme fitting gaskets should be replaced as needed with standard Buna-N or Buna-S gaskets. More resistant gasket materials such as Teflon may also be used.

Equipment CleanUp: To avoid damage to spray equipment, rinse application equipment used to apply liquid fertilizers and N-LOCK® with water after each application.

MIXING DIRECTIONS

Compatibility Agent: Some of the applications suggested for N-LOCK® require the use of a compatibility agent. Be sure to use a compatibility agent registered for agricultural use where required. Most phosphate ester types of compatibility agents are useful in these mixtures. Follow the label directions for the compatibility agent to determine rates and any use precautions.

Application with Liquid Manure

Apply 1 to 2 quarts N-LOCK® per acre when mixing with liquid animal manure. The 2 quart per acre rate is recommended for all fall applications with liquid animal manure. Be sure to premix N-LOCK® and a phosphate ester compatibility agent at a ratio of 1 part phosphate ester compatibility agent to 8 parts N-LOCK® before adding the N-LOCK® mixture to the liquid animal manure.

Application with Anhydrous Ammonia

N-LOCK® is soluble in liquid anhydrous ammonia. It may be pumped into the anhydrous tank through the liquid fill valve before, during, or after loading. Be sure to use properly calibrated pumping and metering systems to inject N-LOCK® into the tank. The mixture of ammonia containing N-LOCK® should then be applied to cropland using conventional ammonia application equipment. **Note:** Although a tank mixture of N-LOCK® with anhydrous ammonia is the preferred method of application, this mixture may also be applied through downstream injection systems.

Application with Liquid Fertilizers

N-LOCK[®] may be mixed with liquid fertilizers such as aqua ammonia or other liquid ammoniacal or urea nitrogen fertilizer compositions if a compatibility agent is used. Follow one of the following methods to create a stable emulsion with N-LOCK[®] in liquid fertilizer: (1)

Pre-mix the compatibility agent and N-LOCK[®] in a separate container and then under continuous agitation add the mixture to the liquid fertilizer; or, (2) add the compatibility agent to the fertilizer under continuous agitation and then add the required amount of N-LOCK[®] to the tank.

Application with Granular Ammonium and Urea

N-LOCK[®] may be impregnated on most dry ammoniacal fertilizers or fertilizer blends containing ammoniacal fertilizers. To insure optimum results, make a uniform application to the field and incorporate immediately.

Use a closed rotary drum mixer equipped with suitable spraying equipment for impregnating N-LOCK[®] on dry fertilizers. Be sure to position the spray nozzle inside the mixer to provide uniform spray coverage of the tumbling fertilizer. The rate of N-LOCK[®] is determined by the rate per acre specified in the crop section in this label. Do not add more than one quart N-LOCK[®] per 100 pounds of nitrogen fertilizer or add less than one quart N-LOCK[®] per 500 pounds of nitrogen fertilizer. At the higher concentrations of N-LOCK[®], the fertilizer may not readily absorb all of the liquid. If this is the case, add an absorptive powder such as Micro-CelE separately and uniformly to the fertilizer blend following addition of N-LOCK[®].

Always apply bulk fertilizers impregnated with N-LOCK[®] immediately and do not store. To prevent loss of N-LOCK[®] by volatilization, be sure that bulk containers are tightly covered while the products are being transported and applied. Incorporate all fertilizers impregnated with N-LOCK[®] immediately after application for optimal performance.

Note: All individual state regulations including those related to flammable liquid handling and to dry bulk blending registration, labeling and application are the responsibility of the individual and/or company selling N-LOCK[®] on fertilizer mixtures.

Precautions:

- 1. Do not use N-LOCK[®] with dry fertilizers containing nitrate such as ammonium nitrate, potassium nitrate or calcium nitrate.
- 2. Do not mix seed with dry fertilizers impregnated with N-LOCK[®].

TANK MIXING WITH HERBICIDES

On corn and sorghum, N-LOCK[®] may be applied in tank mixtures with some preplant incorporated herbicides. Check local crop recommendations to determine which preplant incorporated herbicides are registered for use on corn and sorghum. The mixtures may be in water, in most urea-ammonium nitrate solutions or in N-P-K solutions, slurries or suspensions. The physical compatibility of these tank mixtures should be determined before combining in the spray tank. See the section below on testing for tank mix compatibility.

Always maintain constant agitation during both mixing and application to ensure uniformity of the spray mixture. Read and carefully follow all applicable directions including dosage rates, restrictions, and precautions for the specified crops on labeling for the other products used in combination with N-LOCK[®].

N-LOCK[®] may be tank mixed with herbicides in water or liquid fertilizers using the following mixing sequence:

- 1. Fill the spray tank ½ full of water or liquid fertilizer.
- 2. Begin agitation.
- 3. Add a compatibility aid, if needed. (If water slurried premixes of wettable powders or flowables are used as in Steps 4 and 5, a compatibility aid may be added to the premix for convenience).
- 4. Add wettable powder formulations to the tank (make the water slurry with wettable powders first).
- 5. Add flowable formulations to the tank.
- 6. Add emulsifiable concentrate formulation including N-LOCK[®] to the tank (pre mix 1:2 with water first if introduced to the tank through eductor systems.)
- 7. Add the balance of the water or liquid fertilizer and continue agitation until tank is empty.

Note: The compatibility of N-LOCK[®] with liquid fertilizers and/or herbicide mixtures may be determined by adding proportionate amounts of each ingredient to a small jar, shaking the capped jar, and then letting the

mixture stand for 15 minutes. If a precipitate forms or the mixture separates and these do not readily redisperse, an incompatible mixture is likely and it should not be applied.

CORN

Application Method: Preplant or At-Plant Row or Band Injection
Rate: 1 quart N-LOCK® per acre
Specific Directions: N-LOCK® must be injected or incorporated in a zone or band in the soil with the fertilizer at a minimum depth of 2 to 4 inches during or immediately after application.

Application Method: Preplant or At-Plant Broadcast Application
Rate: 1 to 2 quarts N-LOCK® per acre
Specific Directions: The higher rate is preferred when fall applications are made to spring planted crops. N-LOCK® must be injected or incorporated in a zone or band in the soil with the fertilizer at a minimum depth of 2 to 4 inches during or immediately after application.

Application Method: Postplant (Side Dress) Application
Rate: 0.5 to 1 quarts N-LOCK® per acre
Specific Directions: Make application any time after crop emergence but before 30 days post plant. N-LOCK® must be injected or incorporated in a zone or band in the soil with the fertilizer at a minimum depth of 2 to 4 inches during or immediately after application.

Application Method: Split Application
Rate: 0.5 to 1 quarts N-LOCK® per acre
Specific Directions: A second application may be made postplant following a preplant or at-plant application. The higher rate is recommended where nitrogen fertilization is geared to high yield production. N-LOCK® must be injected or incorporated in a zone or band in the soil with the fertilizer at a minimum depth of 2 to 4 inches during or immediately after application.

RESTRICTIONS:

- Do not apply more than 2 quarts N-LOCK® per acre per year.
- Make only 1 postplant application per year and make it within 30 days of planting.
- Corn, sorghum and wheat may be rotated in less than 1 year from the last application. All other crops must be planted at least 1 year after the last application.

SORGHUM AND WHEAT

Application Method: Preplant or At-Plant Row or Band Injection
Rate: 1 quart N-LOCK® per acre
Specific Directions: N-LOCK® must be injected or incorporated in a zone or band in the soil with the fertilizer at a minimum depth of 2 to 4 inches during or immediately after application.

Application Method: Preplant or At-Plant Broadcast Application
Rate: 1 to 2 quarts N-LOCK® per acre
Specific Directions: The higher rate is preferred when fall applications are made to spring planted crops. N-LOCK® must be injected or incorporated in a zone or band in the soil with the fertilizer at a minimum depth of 2 to 4 inches during or immediately after application.

RESTRICTIONS:

- Do not apply more than 2 quarts N-LOCK® per acre per year.
- Make only 1 postplant application per year.
- Corn, sorghum and wheat may be rotated in less than 1 year from the last application. All other crops must be planted at least 1 year after the last application.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Store in original container and keep tightly closed. Store above 28°F to keep product in solution. If stored below 24°F, crystals may form and settle to the bottom of the container. To re-dissolve the crystals, allow the contents to warm up to about 70°F and to stand for several days at that temperature. Once the crystals have dissolved, roll the container gently to get a uniform mixture of the

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contents.

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: Triple rinse (or equivalent) the container and then offer it for recycling or reconditioning, or puncture and dispose of the container in a sanitary landfill, or by other procedures approved by state and local authorities.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

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 Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. 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 Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. 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 Makhteshim Agan of North America, Inc.'s election, the replacement of product