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C1A / N-Serve 24E / Amend / 08-05-04

(Base label):

(Logo) Dow AgroSciences

# N-Serve® 24E

## Nitrogen Stabilizer

Use to delay nitrification of ammoniacal and urea nitrogen fertilizer compositions in the soil by controlling the nitrification process

**Active Ingredients:** 

nitrapyrin: 2-chloro-6-(trichloromethyl)

Total Ingredients ......100.0%

Contains petroleum distillates

Contains 2 pounds of active ingredients per gallon.

# **ACCEPTED**

DEC 2 2004, Under the Federal Insecticide, Pungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

62719-19

## Keep Out of Reach of Children

## DANGER PELIGRO

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

## **Precautionary Statements**

#### Hazards to Humans and Domestic Animals

Corrosive • Causes irreversible Eye Damage • Harmful If Swallowed, Inhaled or Absorbed Through Skin • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals

Do not get in eyes or on clothing. Wear protective eyewear. Avoid contact with skin. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

## Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selections chart.

#### 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 evewear

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 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:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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.

#### First Aid

If in eyes: 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:** 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 on skin or clothing: 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.

**Note to Physician:** Contains petroleum distillate – vomiting may cause aspiration pneumonia. Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

#### **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 washwaters or rinsate.

## **Physical or Chemical Hazards**

Combustible. Do not use or store near heat or open flame.

#### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do	not ship or store with food.	feeds, drugs or clothing
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EPA Est.	

<sup>®</sup>Trademark of Dow AgroSciences LLC **Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.** 

**Net Contents XXX** 

(Datapack cover):

(Logo) Dow AgroSciences

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EPA Reg. No. 62719-19

EPA Est.	

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(Page 1 through end):

## **Precautionary Statements**

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

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## **Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selections chart.

## 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

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### **Physical or 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. Read all Directions for Use carefully before applying.

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 worker 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, is:

- Coverails
- · Chemical-resistant gloves such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

## Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. **Pesticide Storage:** Store above 28°F to keep product in solution. Below 24°F, crystals may form and settle to the bottom. To redissolve 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, a gentle rolling of the container will ensure a uniform mixture of the 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). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## **General Information**

N-Serve® 24E nitrogen stabilizer is an emulsifiable product that may be used in formulation of and application with aqua ammonia, other liquid ammoniacal or urea nitrogen fertilizer compositions or liquid animal wastes. N-Serve 24 is not a substitute for fertilizer. When liquid or dry ammonium or urea fertilizers or animal wastes are surface applied, N-Serve 24E may be mixed with water and applied during the incorporation operation.

## **General Use Precautions**

N-Serve 24E is corrosive to aluminum components which may affect the operation of pumping, mixing and application equipment. To minimize corrosion of equipment and for maximum effectiveness, do not store liquid fertilizer solutions containing N-Serve 24E. Use the solution within 72 hours of mixing. Rinse application equipment used to apply liquid fertilizers and N-Serve 24E with water after each use. Using hot mix fertilizers with N-Serve 24E is not recommended. High temperatures generated in production of these mixtures can cause rapid degradation of product and a reduction in effectiveness.

**Chemigation:** Do not apply this product through any type of irrigation system.

## **Mixing Directions**

#### **Liquid Fertilizers**

Tank mixtures with fertilizers frequently require a compatibility aid. N-Serve 24E may be mixed with liquid fertilizers if a compatibility agent (registered for agricultural use where required) is used. When adding N-Serve 24E through eductor systems on fertilizer application units, either premix 1 part of N-Serve 24E to 2 parts water, or open the inlet valve only about 1/3 of maximum. Either method will reduce the ratio of N-Serve 24E to fertilizer and, thus, reduce the possibility of formation of undesirable invert emulsions.

When making applications of N-Serve 24E and liquid nitrogen fertilizer compositions or liquid manure, agitation must be provided before and during application to maintain a uniform mixture of N-Serve 24E. The application system must be capable of keeping a suspended solid dispersed throughout the liquid.

#### **Application with Liquid Manure**

Use N-Serve 24E at the rate of 1 to 2 quarts per acre and apply preplant in the fall or spring. The 2 quart per acre rate is recommended for all fall applications with animal manure.

#### **Tank Mixing**

N-Serve 24E may also be applied in tank mixtures with preplant incorporated herbicides. The tank mixes may be in water or in most urea-ammonium nitrate solutions and N-P-K solutions, slurries or suspensions. Check the physical compatibility of these mixtures as indicated below. Tank mixtures of N-Serve 24E and herbicides in water generally do not require a compatibility aid. 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-Serve 24E.

**Mixing Order for Tank Mixes:** Fill the spray tank with water or liquid fertilizer to 1/2 of the required spray volume. Start agitation. Add different formulation types in the order indicated below, allowing time for complete dispersion and mixing after addition of each product. Allow extra dispersion and mixing time for dry flowable products.

- 1. Compatibility aid, if needed
- 2. Wettable powders
- 3. Flowable formulations

4. N-Serve 24E and other emulsifiable concentrates (premix 1:2 with water first if introduced to the tank through eductor systems)

Finish filling the spray tank with water or liquid fertilizer. Maintain continuous agitation during mixing, final filling and throughout application. Apply the mixture within 72 hours of mixing.

**Premixing:** Wettable powder and flowable formulations should be premixed with water (slurried) and added to the spray tank. This procedure assures good initial dispersion of these formulation types. A compatibility aid may be added to the premix for convenience.

**Tank Mix Compatibility Test:** Test compatibility of the intended tank mixture before adding N-Serve 24E to the spray or mix tank. Add proportional amounts of each tank mix ingredient to a pint or quart jar, cap, shake, and let set 15 minutes. Formation of precipitates or layers that do not readily redisperse indicates an incompatible mixture that should not be used.

## **Use and Dosage Recommendations**

N-Serve 24E 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.

## Approved Crops

## Corn, Sorghum, Wheat

**Preplant or At-Plant Row or Band Injection Application:** Use N-Serve 24E at the rate of 1 quart per acre. (See also Split Application on Corn.)

**Preplant or At-Plant Broadcast Application:** Use N-Serve 24E at the rate of 1 to 2 quarts per acre. The higher rate is preferred when fall applications are made to spring planted crops. (See also Split Application on Corn.)

**Postplant (Side Dress) Application in Corn:** Use N-Serve 24E at the rate of 1/2 to 1 quart per acre any time after crop emergence, up to 30 days post plant.

**Split Application on Corn:** A second application may be made postplant following a preplant or at-plant application. Use 1/2 to 1 quart of N-Serve 24E per acre. The 1 quart rate is recommended where nitrogen fertilization is geared to high yield production. The total amount of N-Serve 24E applied in a split application program involving a preplant or at-plant treatment followed by a postplant treatment must not exceed 2 quarts per acre per year.

#### **Restrictions:**

- Do not apply more than 2 quarts of N-Serve 24E per acre per year on corn, sorghum, and wheat.
- Make only 1 postplant application per year.
- Postplant applications may only be made up to 30 days postplant on corn.
- Crops listed on this label may be rotated in less than 1 year from the last application. All other crops are not to be rotated in less than 1 year from the last application.

#### Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

## **Warranty Disclaimer**

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## **Inherent Risks of Use**

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

## **Limitation of Remedies**

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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