

## OUTLAST™

Outlast is a product that protects anhydrous ammonia nitrogen fertilizers from potential losses through leaching. Outlast contains a monoamine oxygenase inhibitor to delay the nitrification of ammoniacal fertilizers and minimize subsequent nitrate for leaching for fertilizers placed at or below the soil surface. Outlast is a premium technology known to increase Nutrient Use Efficiency (NUE).

### GUARANTEED ANALYSIS

#### CONTAINS NONPLANT FOOD INGREDIENT(S)

Active Ingredients:

28%.....Dicyandiamide (DCD) CAS No: 461-58-5

Other Ingredients:

72%.....Solvent and other inert

F002331

### PRECAUTIONARY STATEMENTS

**Inhalation:** Remove to fresh air.

**Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact:** Wash skin with soap and water.

**Ingestion:** Rinse mouth. May increase the absorption or uptake of other chemicals.

### READ THE SAFETY DATA SHEET BEFORE USING THIS PRODUCT.

Always read and follow label directions.

### DIRECTIONS FOR USE

Read the entire label before use. Use according to label directions. Read the entire Conditions of Sale and Limitation of Warranty before buying or using this product. Always wear proper personal protection; use Neoprene gloves (Ansell Edmont Neox Number 9-912) or equivalent, long sleeves, long pants, and chemical splash goggles when handling Outlast nitrogen stabilizer.

### GENERAL INFORMATION

Outlast works best when thoroughly mixed with anhydrous ammonia nitrogen fertilizers that are applied to the soil.

Nitrogen fertilizers treated with Outlast should be applied to the soil in the same manner as nitrogen fertilizers without Outlast.

**NOTE:** When using Outlast, if different farming methods from those normally used are tried, test strips are recommended until such new methods have been proven to be effective.

[Protect this product from freezing.](#)

### Soil Types and Crops

Outlast may be used with any crop and in any soil type whereas best management practices recommend the use of various nitrogen fertilizers, the use of a nitrification inhibitor is deemed beneficial and the fertilizer is placed on or below the surface.

### USE RATE

Outlast nitrogen stabilizer is supplied as a 28% by weight active ingredient solution.

General rate recommendations are based on average conditions that lead to nitrogen loss due to leaching and denitrification. Rates may be adjusted higher as needed based on the expected field conditions, including the following:

- 1) Poorly drained, water logged or heavily compacted soil
- 2) Fields with porous soils, subject to leaching, in areas with excessive water or rainfall
- 3) Fields and crops that benefit from keeping the ammonium form of nitrogen available for a longer time

### USE RATE PER TON FERTILIZER

Anhydrous Ammonia 5 - 7 quarts per ton (5.22 - 7.30 liter per tonne)

UAN 2 quarts per ton (1.89 liter per tonne)

## ANHYDROUS AMMONIA APPLICATION

Ensure operators are wearing proper personal protective equipment for handling anhydrous ammonia.

### Tank Blending Procedure

Wear appropriate personal protective equipment (PPE) according to the SDS. This product is soluble in liquid anhydrous ammonia. It may be pumped into the anhydrous tank through the liquid fill valve before, during, or after loading.

Use a pump and meter to load the appropriate amount of Outlast nitrogen stabilizer into the tank.

Apply the Outlast treated anhydrous ammonia to cropland using conventional ammonia application equipment.

### UAN APPLICATION

Ensure operators are wearing proper personnel protection (see above).

### Blending Procedure

Fill the blend unit half full with UAN solution.

Add Outlast nitrogen stabilizer at the appropriate rate for the entire load and mix.

Add the remaining UAN solution and mix thoroughly prior to the addition of any surfactants, pesticides or any other materials.

### Compatibility

Perform a jar test with any additional products to evaluate compatibility before mixing.

### Injection Systems

Equipment is available, generally categorized as downstream injection systems, to permit the introduction of Outlast into anhydrous near the toolbar without requiring mixing directly into the anhydrous tank.

Follow the equipment manufacturer's instructions for the applying Outlast nitrogen stabilizer to your field.

### GENERAL USE PRECAUTIONS

NOT A FERTILIZER SUBSTITUTE

NOT RECOMMENDED FOR FEED APPLICATION

Observe all precautions on label and read material safety data sheet before use.

Do not apply directly to water. Avoid contaminating waterways and sewers during cleaning of equipment, disposal of wastes. Use and disposal of all materials must be in accordance with all applicable provisions of local, state and federal laws and regulations.

### Storage, Handling and Disposal

Store in a secured place out of reach of children and animals and away from other chemicals. Always store pesticides in the original container. If a leaky container must be contained within another, mark the outer container to identify the contents.

Storage areas must be locked and secure from vandalism, with precautionary signs posted. The storage area must be dry, well-lit, and well ventilated. Keep pesticide storage areas clean. Clean up any spills promptly. Store pesticides away from food, pet food, feed, seed, fertilizers and veterinary supplies. Protect pesticide containers from extreme heat and cold. Store herbicides, insecticides and fungicides in separate areas within the storage unit. Place liquid formulations on lower shelves and dry formulations above. Maintaining a spill kit and fire extinguisher on hand and having emergency phone numbers posted will allow you to be prepared for emergencies. If spill cleanup PPE is stored nearby, but outside the pesticide storage area, it will be accessible when needed.

Dispose of empty containers in accordance with federal, state and local regulations.

Contact your Verdesian representative with any questions on storage, mixing, blending or disposal.

A VERDESIAN NUE SOLUTION®

Outlast™

To access Verdesian's Warranty Statement please go to [vlsi.com/limited-warranty](https://www.verdesian.com/limited-warranty)

This product is guaranteed by: Verdesian Life Sciences U.S., LLC | 1001 Winstead Drive, Suite 480, Cary, NC 27513 | Customer Service: 800-868-6446

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Contents: 2.5 gal (9.46 L) | Density: 9.76 lbs./gal (1.17 kg/L) at 68 °F (20 °C)

Net Wt.: 24.4 lbs. (11.1 kg) | Inv. ID: 1007303.00



VERDESIAN THE NUTRIENT USE EFFICIENCY PEOPLE®

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