

# Limus<sup>®</sup> Pro

## Nitrogen Management

**A nitrogen management product that is applied with urea containing fertilizers, such as urea, urea-ammonium nitrate (UAN) fertilizer or urea-based fertilizer, to minimize nitrogen losses by reducing ammonia volatilization**

### CONTAINS NONPLANT FOOD INGREDIENTS

#### Active Ingredients:

16.88%	N-(n-butyl) thiophosphoric triamide [NBPT] (CAS No: 94317-64-3)
5.63%	N-(n-propyl) thiophosphoric triamide [NPPT] (CAS No: 916809-14-8)
77.49%	<b>Total Other Inert Ingredients:</b> (colorant, fragrance, solvent)
100.00%	<b>Total</b>

Total NBPT and NPPT is manufactured to 22.5% to 25% by weight active ingredient solution.  
Density = 9.055 pounds per gallon (1.085 grams per cubic centimeter) at 68°F

### Keep Out of Reach of Children

#### GHS Signal Word: WARNING

**Hazard Statement:** Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Suspected of damaging fertility. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.



**Precautionary Statements (Prevention):** Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear eye protection. Avoid release to the environment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated body parts thoroughly after handling.

**Precautionary Statements (Response):** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Wash with plenty of soap and water. IF exposed or concerned: Call a POISON CENTER or doctor/physician. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If eye irritation persists: Call a POISON CENTER or doctor/physician.

**Precautionary Statements (Storage):** Store locked up.

**Precautionary Statements (Disposal):** Dispose of contents/container to hazardous or special waste collection point.

### Net Contents:

### Net Weight:

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## Directions For Use

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**Limus<sup>®</sup> Pro nitrogen management** is suitable for use with all nitrogen consuming crops. This product is combined with urea containing fertilizers before application to the soil. **Limus Pro** treatment is recommended for all applications of urea containing fertilizers and can be used at any fertilizer timing.

**Limus Pro** is not a fertilizer substitute and is not recommended for feed application. Urea may be toxic to livestock when ingested.

**Quick Rate Reference Chart**

Fertilizer	Application Rates
Urea	1.5 to 2.0 quarts per ton (2,000 lbs)
UAN	0.75 to 1.0 quart per ton (2,000 lbs)
Other	5.25 to 7.0 fl ozs per 100 lbs urea-N

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### Application Instructions for Use with Urea

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1. Wear proper personal protection including eye protection and chemical-resistant gloves.
2. Weigh the urea and transfer into the mixing or blending equipment.
3. Measure the desired quantity of **Limus Pro**.
4. Apply the **Limus Pro** to the urea in the blender. Blend until the **Limus Pro** is uniformly distributed onto urea. Add other fertilizer materials only after **Limus Pro** coverage is achieved.
5. Under conditions of high temperature and high humidity, particles may become sticky. Addition of other fertilizer materials, such as potash or fine clay powders, may reduce bridging.

#### Application Rate

1.5 to 2.0 quarts of **Limus Pro** per ton of urea (1.42-1.90 liters per 907 kilograms of urea).

Rate recommendations are based on average conditions. The higher end of the rate range is recommended when multiple conditions favoring ammonia volatilization (high temperature, high humidity, soil pH >7.0, moist soil, crop residues) are present or when a lengthened interval is expected before an incorporation event, such as irrigation or rainfall less than 0.5 inch.

#### Limus Pro Treated Urea Storage

Treated urea can be stored at least 9 months at 70°F without significant degradation.

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### Application Instructions for use with UAN

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1. Wear proper personal protection including eye protection and chemical-resistant gloves.
2. Fill spray tank with half the desired amount of UAN.
3. Measure the desired quantity of **Limus Pro**.

4. Add the **Limus Pro** and mix thoroughly. Once it is well mixed, other products can be added.
5. Continue mixing while adding the remaining UAN.

#### Application Rate

0.75 to 1.0 quart of **Limus Pro** per ton of UAN (0.71 to 0.95 liters per 907 kilograms of UAN)

Rate recommendations are based on average conditions. The higher end of the rate range is recommended when multiple conditions favoring ammonia volatilization (high temperature, high humidity, soil pH >7.0, moist soil, crop residues) are present or when a lengthened interval is expected before an incorporation event, such as irrigation or rainfall less than 0.5 inch.

#### Compatibility

**Limus Pro** treated UAN has demonstrated good compatibility with most pesticides and adjuvants. However, not every potential combination has been tested. Glyphosate containing herbicides may increase the rate of **Limus Pro** degradation in a UAN tank mix. It is recommended that all tank mixes be applied to the soil soon after blending.

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### Application Instructions for other Urea Fertilizers

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Other urea fertilizers include, but are not limited to: soluble urea, methylene urea, and manure.

#### Application Rate

5.25 to 7.0 fl ozs of **Limus Pro** per 100 lbs urea-N based on analysis (155 to 207 mL per 45.4 Kg urea-N)

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### Application Instructions for Direct Soil Applications

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**Limus Pro** can reduce ammonia volatilization of urea containing fertilizer when **Limus Pro** is applied directly to the soil surface between 2 days before and 2 days after the fertilizer application. Apply **Limus Pro** with at least 20 gallons of water per acre to the soil surface.

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### Storage and Disposal

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**Storage:** Store locked up. Segregate from foods and animal feeds. Keep away from heat. Protect from direct sunlight. Protect from temperatures below 14°F (-10°C) and above 104°F (40°C). Changes in the properties of the product may occur if substance/product is stored outside indicated temperature range for extended periods of time.

**Product and Container Disposal:** Dispose of contents/container to hazardous or special waste collection point.

**Accidental Release Measures: DO NOT** breathe vapors/spray. Use personal protective clothing. Avoid contact with skin, eyes and clothing. **DO NOT** discharge into the subsoil/soil. **DO NOT** discharge into drains/surface waters/groundwater. For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). For large amounts: Dike spillage. Pump off product. Dispose of absorbed

material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

**State Right to Know Description / CAS # or TSNR**

dichloromethane / 75-09-2; dimethyl sulfoxide / 67-68-5; propylene glycol / 57-55-6

**EMERGENCY CONTACT: CHEMTREC 1-800-424-9300  
BASF Corporation 1-800-832-HELP (4357)**

**Conditions of Sale and Warranty**

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer. BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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