



**CONTAINS:** Active ingredients: Duromide (27%) CAS RN 2093385-47-6, N-(n-butyl) thiophosphoric triamide (NBPT) (16%) CAS RN 94317-64-3  
Inactive ingredients (57%): N-methyl-2-pyrrolidone CAS RN 872-50-4, non-hazardous component, surfactant blend  
Use Rate: Urea (1.5 Quarts/Ton) and UAN (0.75 Quart/Ton)

## ANVOL™

### HAZARD STATEMENTS

Causes skin irritation. Causes serious eye damage. May damage fertility or the unborn child.

### PRECAUTIONARY STATEMENTS

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

**IF ON SKIN:** Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

DANGER



Active ingredients from China  
and the United States

Supplier:  
Koch Agronomic Services, LLC  
4111 E. 37th St. N.  
Wichita, KS 67220  
kochmsds@kochind.com  
1-866-863-5550

FOR CHEMICAL  
EMERGENCY:

Call CHEMTREC day or night.

USA/Canada – 1-800-424-9300

Outside USA/Canada – 1-703-527-3887

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Read and understand the safety data sheet before using this product.

**WARNING: READ THE ENTIRE LABEL BEFORE USING OR OPENING THIS PRODUCT, INCLUDING ALL PRECAUTIONS, DIRECTIONS FOR USE, STORAGE AND HANDLING, TERMS AND CONDITIONS OF USE, WARRANTY LIMITATIONS AND LIMITATIONS OF LIABILITY AND REMEDIES.**

ANVOL™ nitrogen stabilizer is designed to protect urea-based fertilizers from ammonia volatilization and may be used on any crop that requires nitrogen fertilization, including row crops, specialty crops, forages, sod, turfgrass, ornamentals and other landscape and nursery plantings. This product is recommended for surface, shallow-placed, shallow-banded or shallow-incorporated (less than two inches) application of urea and urea-containing fertilizers such as pre-plant, pre-emergence, sidedress, topdress or other post-planting applications. The benefits of ANVOL™ stabilizer as a urease inhibitor are a result of its ability to retard the hydrolysis of urea and control volatilization, preventing ammonia loss while the urea is on the soil surface or less than two inches deep in the soil.

#### FIRST AID MEASURES

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**IF ON SKIN:** Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

**IF INHALED:** Move to fresh air. Call a physician if symptoms develop or persist.

**IF INGESTED:** Rinse mouth. Get medical attention if symptoms occur.

#### FIRE FIGHTING

Suitable extinguishing media: Water fog. Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Extinguishing media which must not be used for safety reasons: Do not use water jet as an extinguisher, as this will spread the fire.

HMIS® Ratings	
Health	3*
Flammability	1
Physical Hazard	0
Personal Protection	X

\*Chronic Hazard

#### GENERAL PRECAUTIONS AND DIRECTIONS FOR USE

**WARNING:** Keep out of the reach of children. Pregnant or breastfeeding women must not handle this product. Read the entire label and safety data sheet before use.

Use only according to label directions. Always wear proper personal protection when handling the product (long sleeves and long pants, goggles and chemical resistant gloves). Use only with adequate ventilation (large volumes of air movement). If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Do not apply directly to water. Do not contaminate waterways and sewers during cleaning of equipment or disposal of wastes. Always adhere to applicable provisions of federal, state, provincial and local laws and regulations.

Do not use in livestock feed. Keep livestock off treated areas until after 14 days or 1 inch of rainfall has accumulated. Urea and UAN may be toxic to livestock when ingested.

Do not enter treated areas until spray has thoroughly dried.

#### ANVOL™ NITROGEN STABILIZER USE RATE CHART

Urea	1.5 Quarts/Ton
UAN	0.75 Quart/Ton

#### FOR BLENDING ON UREA

##### Equipment Required

\*An accurate scale to weigh materials.

\*A fertilizer blender or other equipment suitable for rolling or blending the urea fertilizer with ANVOL™ stabilizer. A rotary device that can tumble the urea and allow for uniform contact with the product without spillage is appropriate. Auger and paddle mixers may also be used. Exposed inner surfaces should be clean, dry and rust-free.

##### Procedure

1. Weigh the urea and transfer into the mixing or blending equipment.
2. Measure the desired quantity of ANVOL™ stabilizer.
3. Apply the product to the urea in the blender. Blend well before introducing other fertilizer materials and allow adequate time (at least 1 minute/ton) for uniform coverage. A dye is included in the product to assist in evaluating the uniformity of coverage.
4. Under certain temperature and humidity conditions, urea blended with the product may stick together. Often the addition of other fertilizer materials to the blender, such as potash, will eliminate the need to add a drying agent. If the particles remain sticky, add small amounts of finely ground, highly absorbent, free-flowing powders such as attapulgite clays at concentrations as low as 0.25% by weight of the treated urea.

#### FOR MIXING WITH UREA-AMMONIUM NITRATE (UAN) SOLUTIONS

##### Procedure

1. Fill the tank half full with UAN solution.
2. With agitators on, but prior to adding pesticides or surfactants, add the appropriate amount of ANVOL™ nitrogen stabilizer for the desired concentration in the full volume.
3. Mix well and then add the remainder of the UAN solution.
4. Use blended UAN solution soon after mixing. Degradation of the active ingredient is known to be impacted by pH and temperature. UAN with a pH greater than 7 tends to increase the storage time; a pH of less than 7 will result in more rapid degradation of the active ingredient. Other additives to the UAN may also result in a more acidic solution, thus reducing the storage time.

#### COMPATIBILITY

Glyphosate herbicides may cause an increase in the rate of degradation when tank mixed with ANVOL™ nitrogen stabilizer. Therefore such mix should be applied soon after mixing to avoid a possible reduction in the effectiveness of the active ingredient.

## HANDLING, STORAGE AND DISPOSAL

Avoid exposure – use care in handling/storage. Wear appropriate personal protective equipment. Avoid breathing mist/vapors/spray. Wear eye and face protection. Avoid prolonged exposure. Handle an open container with care. Wash before eating, drinking and/or smoking. Store this product in tightly closed original container in a well-ventilated place and in accordance with local/regional/national/international regulations. Keep away from food, drink and animal foodstuffs. Avoid freezing. Store at temperatures between 10°F and 100°F. If the product is subjected to temperatures below 5°F for an extended period of time, it will become solid. If this occurs, move product to a warm location where the inside temperature of the product can be brought above 32°F. At this point, the product will return to its normal liquid state. Following these procedures, the product may be used normally. No degradation of active ingredient will occur with the product that has been frozen. Avoid high temperatures. Long-term storage at temperatures above 100°F and long-term storage of open containers will cause the product to degrade. As the product degrades, it can release harmful gases. Store below 100°F and use opened containers within 30 days. Always use oldest stock first.

Dispose of according to federal, state, and local regulations. Rinse empty containers thoroughly. Cold temperatures, hard water, or less than adequate amounts of water in rinsing may result in the formation of crystals. Offer empty containers for (1) recycling, (2) reconditioning or (3) dispose of in a landfill or by other procedures approved by relevant authorities.

## TERMS AND CONDITIONS OF USE

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## LIMITED WARRANTY

Koch Agronomic Services, LLC's exclusive warranty for this product is that (1) at the time of packaging of this product it conforms to the chemical description on the label and (2) it will be reasonably fit for the purpose stated on the label when used in strict accordance with the label directions, subject to the warranty limitation set forth below.

## WARRANTY LIMITATION

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1. Refund of the purchase price paid by buyer/user for any defective product, or
2. Replacement of the amount of defective product used by buyer/user.

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## CALIFORNIA PROPOSITION 65



WARNING: Cancer and Reproductive Harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# KOCH™

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For a list of relevant patents that cover this product, please see <http://www.kochagronomicservices.com/patents/>.

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