



# ACA<sup>®</sup> Concentrate 15-0-0

AN AGRICULTURAL CROP ADDITIVE FOR USE WITH ANHYDROUS AMMONIA,  
NITROGEN FERTILIZER SOLUTIONS, AND DRY GRANULAR FERTILIZER

**GUARANTEED ANALYSIS**

	By Weight
Total Nitrogen (N) .....	15.00%
15% Ammoniacal Nitrogen	
Zinc (Zn) .....	17.00%
Derived From: Anhydrous Ammonia and Zinc Oxide	

**KEEP OUT OF REACH OF CHILDREN**



**WARNING**

Contains Ammonia. Avoid breathing fumes. Avoid contact with eyes, skin and clothing. Causes eye and skin irritation.

**WARNING**

CONTAINS AMMONIA.  
CONTENTS MAY BE UNDER PRESSURE.  
USE CAUTION WHEN OPENING.  
KEEP CONTAINER CLOSED WHEN NOT IN USE.  
LOSS OF AMMONIA WILL  
CAUSE PRODUCT TO SOLIDIFY.

When this product is used with anhydrous ammonia, user must follow all safe handling practices for anhydrous ammonia including, but not limited to, protective equipment, materials of construction and procedures employed. Wear goggles and gloves when handling. Harmful if inhaled or absorbed through skin. Causes eye and skin irritation. Avoid breathing fumes.

Density: 10.54 lbs/gallon @ 68°F

<b>Liquid Measure:</b>	<b>gallons (</b>	<b>liters)</b>
<b>Net Weight:</b>	<b>lbs (</b>	<b>kg)</b>

**FIRST AID**

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15 to 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:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. 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 to 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 by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565**

**GENERAL INFORMATION**

ACA<sup>®</sup> CONCENTRATE is a product which improves crop production when used with anhydrous ammonia, liquid and dry fertilizers containing nitrogen. It is intended for use with ammonia by mixing with the liquid anhydrous ammonia prior to application or with other liquid fertilizers by mixing with such solutions prior to application. It can be used with dry blended fertilizers by impregnation on the dry fertilizers prior to application.

**MIXING: ANHYDROUS AMMONIA**

ACA CONCENTRATE is readily soluble in the liquid anhydrous ammonia. It is not soluble in ammonia vapor. Some liquid ammonia is required to keep the ACA CONCENTRATE in solution. Thus, a few, simple procedures must be followed in using this product to avoid problems in handling and to obtain optimum results.

Carefully meter ACA CONCENTRATE into the anhydrous ammonia nurse tank or applicator tank by pumping it through an accurate, calibrated metering device into the liquid ammonia, either before or after filling, or as the tank is being filled. Use a positive flow system or check valves, where appropriate, to prevent one product from entering the delivery tank of the other. Introducing both products simultaneously into the nurse tank or applicator tank automatically provides the mixing required for a uniform, homogeneous solution.

**DRY GRANULAR FERTILIZER**

ACA CONCENTRATE can be applied by impregnation on dry granular fertilizers such as granular UREA, AMMONIUM NITRATE, AMMONIUM PHOSPHATE OR DRY BLENDED FERTILIZERS THAT ARE COMPOSED OF AT LEAST 50% OF A COMBINATION OF UREA, AMMONIUM NITRATE OR AMMONIUM PHOSPHATE GRANULAR FERTILIZERS. For use with dry granulated fertilizers ACA CONCENTRATE should be impregnated on the fertilizer granules immediately prior to application. For uniform coverage of the fertilizer granules, dilute the proper amount of ACA CONCENTRATE (determine the proper rate of ACA CONCENTRATE by multiplying the BANDED OR BROADCAST RATE of ACA CONCENTRATE by the number of acres (1) one ton of blended fertilizer will cover) with sufficient nitrogen solution to equal (1) one gallon of liquid mixture per ton of dry blended fertilizer. This mixture should be applied to the granular fertilizer either in the fertilizer blender as it is mixing, or onto the fertilizer as it is entering the fertilizer blender drum.

**LIQUID FERTILIZERS**

For use with liquid fertilizers ACA CONCENTRATE should be mixed into the liquid fertilizer immediately prior to application. For uniform mixing of ACA CONCENTRATE with the liquid fertilizer dilute the proper amount of ACA CONCENTRATE (determine the proper rate of ACA CONCENTRATE by multiplying the BANDED OR BROADCAST RATE of ACA CONCENTRATE by the number of acres (1) one ton of blended fertilizer will cover) with each ton of liquid fertilizer. This should be thoroughly mixed with the liquid fertilizer immediately prior to application. NOTE: It is important the ACA CONCENTRATE be thoroughly mixed throughout the fertilizer mixture. This is necessary for uniform application in the field.

When mixing with 32% nitrogen solutions or other liquid fertilizer solutions which contain very little water, premix the ACA CONCENTRATE with at least an equal amount of water first, then add to the fertilizer solution while mixing thoroughly to disperse.

**NOTE: ACA CONCENTRATE MAY NOT BE COMPATIBLE WITH CERTAIN CLEAR LIQUID FERTILIZERS THAT CONTAIN PHOSPHATE IN THE FORM OF POTASSIUM ORTHO PHOSPHATE. THESE FERTILIZERS INCLUDE NACHURS<sup>™</sup> FERTILIZER AND OTHER SIMILAR PRODUCTS. INCOMPATIBILITY MAY ALSO OCCUR WITH CLEAR LIQUID FERTILIZERS THAT ARE FORMULATED TO A LOW pH, SUCH AS THE US<sup>™</sup> UREA SULFURIC ACID FERTILIZERS.**

**DIRECTIONS FOR USE: ANHYDROUS AMMONIA**

When used with anhydrous ammonia, unless directed otherwise, meter .557 gallons (4.5 pints or 5.88 pounds) of ACA CONCENTRATE into each ton of liquid ammonia. (This is equivalent to 1 gallon of ACA CONCENTRATE per 3589 pounds of anhydrous ammonia or 100 pounds of ACA CONCENTRATE per 34,000 pounds of ammonia). This gives an ammonia solution containing .05% Zn, or 1 pound Zn per ton of solution. Apply ammonia mixture by injecting into soil in the same way anhydrous ammonia is normally applied. Problems may be encountered in applying the ammonia mixture when flow rates through delivery tubes are low. This occurs when shanks are closely spaced and/or application rates are low. A white solid material can start building up in the tubes between the metering device and injection shanks, or in the injection knife shank tubes. This is caused by all liquid ammonia being flashed to vapor as it passes from regulator to knife when low delivery rates are used.

If enough solid material is deposited in the delivery tubes, they can begin plugging. To avoid or minimize this problem observe the following:

1. Install a pressure gauge (0-60 psi) in the manifold. If delivery tube pressure is below 18 to 20 psi during application, build-up will likely occur. A rise in manifold pressure during application will give the operator an indication that a build-up problem is starting.
2. The meter should be set to deliver 5 to 8 pounds more nitrogen per acre than normal setting with straight ammonia. ACA CONCENTRATE apparently reduces flow through the meter, making calibration low.
3. Observe the following minimum application rates of nitrogen per acre:

Knife Spacing Inches	Pounds of Nitrogen Delivered at Tractor Speed, MPH					
	4	5	6	7	8	
40	120	100	80	65	60	
30	160	130	110	100	95	
20	240	195	160	135	125	

4. Make sure injection equipment adds the correct amount of ACA CONCENTRATE to the nurse tank. Too much can result in plugging occurring at higher application rates than usual.

**DRY GRANULAR FERTILIZER— LIQUID FERTILIZER OTHER THAN ANHYDROUS AMMONIA**

**RATE OF APPLICATION:** When ACA CONCENTRATE is used with dry granular fertilizers and liquid fertilizers other than anhydrous ammonia the following rates apply:  
Band Application: 5.33 to 10.66 fl. ozs. per acre.  
Broadcast Application: 10.66 to 24 fl. ozs. per acre.

**EQUIPMENT**

The equipment used to inject ACA CONCENTRATE into anhydrous ammonia and otherwise convey ACA CONCENTRATE must be appropriate for anhydrous ammonia service. No brass, copper or galvanized pipe or fittings should be used. Only hose, valves and fittings approved for anhydrous ammonia service can be used.

**STORAGE AND DISPOSAL**

**STORAGE:** Store in original containers only. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. LOSS OF AMMONIA WILL CAUSE PRODUCT TO SOLIDIFY. Store in a cool, dry, well ventilated place, preferably in a locked storage area. Store out of direct sunlight.

**PRODUCT DISPOSAL:** If possible, dispose of excess product by use according to label directions. Contact your state environmental agency or the hazardous waste representative at your EPA Regional Office for guidance on other approved practices.

**CONTAINER DISPOSAL:** Do not reuse container for other purposes. Triple rinse container, then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.  
**For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC 1-800-424-9300.**

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

BEFORE BUYING OR USING THIS PRODUCT, read the Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary. LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, when the product is used in accordance with such Directions for Use under normal conditions of use. LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

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