



AWAKEN 3D

16-0-2

GUARANTEED ANALYSIS:

Total Nitrogen (N)	16.00%
16.0% Urea Nitrogen	
Soluble Potash (K ₂ O)	2.00%
Boron (B)	0.02%
Copper (Cu)	0.15%
0.15% Chelated Copper	
Iron (Fe)	0.15%
0.15% Chelated Iron	
Manganese (Mn)	0.15%
0.15% Chelated Manganese	
Molybdenum (Mo)	0.0006%
Zinc (Zn)	2.70%
2.70% Chelated Zinc	

Derived From: Urea, Potassium Acetate, Sodium Borate, Cu EDTA, Fe HEDTA, Mn EDTA, Zn EDTA and Sodium Molybdate

WARNING: This product contains molybdenum (Mo). Crops high in molybdenum can be toxic to ruminant animals. Use only according to manufacturer's directions.

WARNING: This product contains Boron; application to any crops other than those recommended may result in serious injury.

KEEP OUT OF REACH OF CHILDREN WARNING

May be harmful if swallowed, inhaled or absorbed through skin.
May cause eye and skin irritation

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

AWAKEN® 3D 16-0-2 is a plant nutrient solution that contains ACA, an agricultural crop additive, as well as other plant nutrients. It will not by itself provide all the nutrients normally required by crops.

AWAKEN 3D 16-0-2 is intended for mixing or blending with other fertilizer materials to produce fertilizers whose total primary nutrient guarantees equal or exceed 24%.

EQUIPMENT

Brass, Copper and galvanized metals may be subject to mild corrosion from prolonged or repeat contact with this product.

COMPATIBILITY

Ammonium polyphosphate fertilizers tend to be more compatible with AWAKEN 3D 16-0-2 than are orthophosphate types. Including some polyphosphate in the mixture often improves compatibility of orthophosphates. Proposed mixtures should be evaluated in a jar test before full scale use. Fertilizer based mixtures that also contain pesticides should be sprayed as soon as possible.

Note: When combining AWAKEN 3D 16-0-2 with phosphate fertilizers vigorous agitation is required for good product mixing. See mixing directions below for more information.

MIXING INSTRUCTIONS

For certain uses, such as in-furrow injection, AWAKEN 3D 16-0-2 is often used undiluted. Depending on desired row spacing, flow rate and other factors,

dilution with water may be desirable. Mix only enough material for use on the day of application.

In combination with water based mixtures, nitrogen solutions, or pesticides, mix as follows:

- 1) Fill mixing tank about ½ full with water.
- 2) Start agitation and add required amount of AWAKEN 3D 16-0-2.
- 3) Finish filling tank with water and pesticide. Continue agitation until tank is emptied. Apply the spray mixture as soon as possible and avoid storing for prolonged periods.

Note: When combining AWAKEN 3D with phosphate fertilizers, mix as follows:

- 1) Add a small amount of fertilizer to the mixing tank.
- 2) Start bypass agitation, then add the required amount of AWAKEN 3D, and vigorously agitate until it is completely mixed into solution.
- 3) Add remaining phosphate fertilizer and continue agitation until tank is emptied. When phosphate fertilizers are combined with AWAKEN 16-0-2, bypass agitation alone does not provide sufficient agitation to ensure a good product mixture. Remove in line strainers on the suction side of the pump when combining AWAKEN 3D with phosphate fertilizers.

For applications such as side dress, AWAKEN 3D 16-0-2 can be mixed with many starter fertilizers. Check compatibility of specific combinations before use. Using at least 5.0 to 10.0 gallons of liquid fertilizer per acre generally results in best compatibility.

USE RATE GUIDELINES

The information below is to be used as a guide for the use of AWAKEN® 3D. Apply as needed based on soil tests or according to recommendations in your nutrient management plan. Recommended standard rate is 2.0 pints per acre. Contact your Loveland Products representative for specific information.

APPLICATION INSTRUCTIONS

Crop	Application rate per acre	Application Directions and Timing
(01) Root and Tuber Vegetables including Carrot, Ginseng, Horseradish, Parsley (turnip-rooted), Potato, Radish, Sugar Beet, Sweet Potato, Turnip	1.0 to 4.0 qts	1st: At 2- to 4-true leaf stage. May repeat application at 14- to 21-day intervals until harvest. Thorough spray coverage is necessary.
(03) Bulb Vegetables including Garlic, Leek, Onion	2.0 to 4.0 pts	1st: At 3-leaf stage. Repeated applications can be made every 10 to 14 days up until 10 days prior to harvest. Thorough coverage and leaf wetting is required.
(04) Leafy Vegetables including Celery, Head and Leaf Lettuce and Spinach	2.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Repeat applications can be made every 14 to 21 days up until 10 days prior to harvest. AWAKEN 3D will perform best with minimum 1% concentration of Awaken 3d in the final solution.
(05) Brassica Vegetables including Broccoli, Cabbage, Cauliflower, Kale, and Mustard greens	2.0 to 6.0 pts	1st: At 2- to 4-true leaf stage. Repeat applications can be made every 10 to 14 days up until 10 days prior to harvest. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(06) Legume Vegetables (Succulent or Dried) including Bean (all types), Peas and Soybeans**	2.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Repeat applications can be made every 10 to 14 days.
(08) Fruiting Vegetables including Eggplant, Pepper and Tomato	2.0 to 4.0 pts	1st: At 2- to 4-true leaf stage or after transplant recovery. Repeat applications every 10 to 14 days up until 10 days prior to harvest. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(09) Cucurbit Vegetables including Cantaloupe, Cucumber, Honeydew, Muskmelon, Squash (summer and winter) and Watermelon	2.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Repeat applications can be made every 10 to 14 days up until 10 days prior to harvest. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(10) Citrus Fruit including Grapefruit, Lemon, Lime, Sweet Orange and Tangerine	1.0 to 4.0 qts	Apply prior to spring and summer root flush or when trees show signs of sugar accumulation in the leaves due to inadequate phosphorus mobility. Repeat application at 14-day intervals as needed. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(11) Pome Fruits including Apple and Pear	2.0 to 4.0 qts	Beginning at petal fall. Continue in cover sprays until harvest. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(12) Stone Fruits including Apricot, Cherry, Peach and Plumcot	2.0 to 6.0 pts	Beginning at full leaf emergence. Avoid applications while flowers are open. Can repeat as needed every 14 to 21 days until harvest. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(13) Berry and Small Fruit including Blackberry, Blueberry, Caneberry, Kiwi, Raspberry and Grape (except Strawberry)	2.0 to 6.0 pts	1st: At full leaf emergence 2nd: just prior to bloom. Can repeat as needed every 14 to 21 days until harvest. Co-factors in AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(13) Strawberry	2.0 to 4.0 pts	1st: After transplant recovery. 2nd: 10 to 14 days later before bloom. Can repeat as needed every 14 to 21 days until harvest. Co-factors in AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.

Application Instructions Cont'd.

Crop	Application rate per acre	Application Directions and Timing
(14) Tree Nuts including Almonds, Cashews and Pecans	1.0 to 4.0 qts	Beginning at full leaf emergence. Avoid applications while flowers are open. Can repeat as needed every 14 to 21 days until harvest. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(15) Cereal Grains including Barley, Corn** (field, pop, sweet), Millet, Oats, Rice, Sorghum and Wheat	2.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Applications can be made at 14- to 21-day intervals up to leaf senescence.
(16) Forage, Fodder and Straw of Cereal Grains	1.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Applications can be made at 14- to 21-day intervals up to leaf senescence.
(17) Grass Forage, Fodder and Hay	1.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Additional applications between cuttings may improve feed quality and increase stand vigor.
(18) Nongrass Animal Feeds including Alfalfa, Clover, Hay and Vetch	2.0 to 4.0 pts	Seeding alfalfa, clover, hay and vetch: Apply at 2- to 4-trifoliate stage. For established crop, application at green-up and 5 to 10 days after each cutting has shown significant improvement in feed quality.
(19) Herbs and Spices including Basil, Dill, Mustard and Sage	2.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Repeated applications can be made every 14 to 21 days up until 10 days prior to harvest. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
(20) Oil Seed Crops including Canola**, Flax and Sunflower	2.0 to 4.0 pts	1st: At 2- to 4-leaf stage. Repeated application can be made every 14 to 21 days until crop senescence.
(22) Stalk, Stem and leaf petiole vegetables, Asparagus, bamboo shoots and celery	2.0 to 4.0 pts	1st: 10 days after emergence. Repeated applications can be made every 14 to 21 days up until harvest. AWAKEN 3D will perform best with minimum 1% concentration of AWAKEN 3D in the final solution.
Cotton**	1.0 to 4.0 qts	1st: At 2- to 4-true leaf stage. Repeated applications can be made every 14 to 21 days.
Peanut	2.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Repeated applications can be made every 13 to 21 days. Beginning bloom to beginning seed fill is a critical period.
Sugarcane	2.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Applications can be made at 14- to 21-day intervals up to leaf senescence.
Tobacco	1.0 to 4.0 pts	1st: At 2- to 4-true leaf stage. Repeated applications can be made every 14 to 21 days.
Ornamental and Landscape	2.0 to 4.0 pts	Begin on emergence of spring growth or deficiency symptoms. Repeat every 14 to 21 days as needed. Use minimum 1:200 dilution rate or 0.7 fl.oz / gal of spray volume
Turf	1.0 to 2.0 oz /1000 sq ft	Begin on emergence of spring growth or deficiency symptoms. Repeat every 14 to 21 days as needed. Use minimum 1.0 gallon spray solution per 1000 sq ft.

**Can be tank mixed with glyphosate products registered for use on Roundup Ready® crops.

Note: Not all of the micronutrients in this product are necessary for all crops grown in Wisconsin that are listed on this label.

STORAGE AND DISPOSAL

STORAGE: Store in original containers only. Keep containers tightly closed when not in use. Store in a cool, dry well-ventilated area, preferably in a locked storage area away from children, feed and food products, and seed. Store above 32 °F/0 °C. Do not contaminate water, food, or feed by storage or disposal. **DISPOSAL:** Do not reuse container. Completely empty container into application equipment. Thoroughly rinse container, adding rinse water to the spray tank.

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.

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.regulatory-info-lpl.com/>

Tests have not been carried out under all possible use conditions and Seller cannot and does not represent or warrant that the goods are compatible with all other chemicals or under all use conditions.

AWAKEN is a registered trademark of Loveland Products, Inc.



WARNING

This product can expose you to chemicals including nickel, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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FOR AGRICULTURAL AND PROFESSIONAL USE ONLY



Density: 10.36 lbs/gallon @ 68 °F
Net Contents: 250 gallons (946.35 liters)
Net Weight: 2,590 lbs (1174.80 kg)
Product code: 1000847320

GUARANTEED BY: LOVELAND PRODUCTS, INC.® P.O. BOX 1286 GREELEY, CO 80632-1286

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