

**CAUTION**  
KEEP OUT OF REACH OF CHILDREN  
READ SAFETY DIRECTIONS BEFORE OPENING OR USING



**Loveland**  
**PRODUCTS**

# AWAKEN®

**20-0-2 W/V**

ANALYSIS .....	W/V%
Nitrogen (N) .....	20.0000
Soluble Potash (K <sub>2</sub> O) .....	2.0000
Boron (B) .....	0.0200
Copper (Cu) .....	0.1900
Iron (Fe) .....	0.1900
Manganese (Mn) .....	0.1900
Molybdenum (Mo) .....	0.0007
Zinc (Zn).....	3.3600

Derived from: Urea Ammonium Nitrate, Anhydrous Ammonia, Potassium Nitrate, Sodium Borate, Copper Citric Acid, Ferrous Citric Acid, Manganese Citric Acid, Sodium Molybdate, Zinc Oxide, and Zinc Citric Acid.

#### GENERAL INFORMATION

AWAKEN® is a plant nutrient solution. It will not by itself provide all the nutrients normally required by crops. To be used as part of a complete fertiliser program.

AWAKEN is recommended especially for:

- 1) Mixing with liquid fertilisers for pre-emergent or post-emergent application.
- 2) Application in irrigation water, either alone or in combination with fertilisers.
- 3) Mixing with water spray solutions for soil or foliar application.
- 4) Application as impregnated with dry fertiliser.

The prevention of nutrient deficiencies in crop is preferable to correcting them after symptoms appear, although this can often be done by prompt soil and/or foliar application. Foliar applications are recommended when fast correction is necessary. It is recommended that soil and/or plant tissue samples be analyzed to determine nutrient levels prior to using this product. This product is to be used where deficiencies, based on soil/tissue analysis, have been identified. AWAKEN should be well mixed with water, water/fertiliser solutions, or pesticide solutions before application. Some foliar burning could result if applied during hot, dry conditions. For additional information on rates, timing of application and hybrids or crops susceptible to phytotoxicity, consult your local agronomist.

#### APPLICATION RECOMMENDATIONS

**Crop Use** - Can be applied on any horticultural or broadacre crop.

**Foliar Applications** - Apply at the rate of 1.2-4.7 L/ha. Use a minimum spray volume of 50-100 L of water/ha by ground rig for broadacre crops and use a minimum spray volume of 20-30 L of water/ha by air for broadacre crops. Use a minimum spray volume of 100-500 L or to the point of run-off for fruiting/leafy vegetable crops and 500-2000 L/ha or to the point of run-off for tree and vine crops by ground rig application. Use a minimum spray volume of 30 L/ha by air for horticultural crops.

**Sprinkler System** - If applied through a sprinkler system, use a backflow prevention device to avoid contamination of the water supply.

**In-Furrow Injection Application to Soil** - Apply at the rate of 3.0-4.7 L/ha at planting. Injection equipment must be calibrated using AWAKEN in order to deliver the recommended amount. Consult equipment manufacturer's literature for calibration procedure. If dilution is necessary to obtain proper flow rate, use only clean water or microfiltered liquid nitrogen solution for dilution. If pesticides are added, check compatibility and follow label precautions and directions for each product used.

**Drip Irrigation Systems** - Apply 3.0-4.7 L/ha several times from pre-plant through seedling and early vegetative crop stages. Regular growing season use may be desired for established groves or orchards, although spring is probably the best time for a single application. Use a backflow prevention device to avoid contamination of the water supply.

**Dry Fertiliser Impregnation** - Many dry fertilisers may be impregnated with AWAKEN. Treat such that the 3.0-4.7 L/ha application rate will be achieved when the dry fertiliser is spread. Blends containing at least 50% of a mixture of potassium chloride, ammonium phosphate and/or nitrate type fertilisers are generally suitable for impregnation. Apply AWAKEN uniformly to the dry blend using a spray bar in the blender, a nozzle mounted on an auger, a nozzle mounted over a conveyor, or other similar setup. Use liquid nitrogen solution to dilute AWAKEN if additional spray volume is needed for coverage. For best results, dry blends must be applied to soil uniformly and should be incorporated into the root zone of the crop. Use the blend as soon as possible after blending.

**PRECAUTION:** DO NOT to use AWAKEN as a liquid injection or drip irrigation application when establishing seed inoculated legume crops.

#### EQUIPMENT

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

#### COMPATIBILITY

AWAKEN can be applied alone or with other compatible spray materials. Ammonium polyphosphate fertilisers tend to be more compatible than 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. Fertiliser based mixtures that also contain pesticides should be sprayed as soon as possible.

#### MIXING INSTRUCTIONS

For certain uses, such as in-furrow injection, AWAKEN 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.

For mixture with water in other types of applications, mix as follows: Fill mixing tank about ½ full with water. Start agitation and add required amount of AWAKEN. Finish filling tank with water. Continue agitation until tank is emptied. Apply the spray mixture as soon as possible. Avoid storing for prolonged periods. For applications such as side dress, AWAKEN can be mixed with many starter fertilisers.

**Tank Mixes:** DO NOT mix with pesticides or other fertilisers without compatibility test. An adequate test for physical compatibility involves mixing in a small container, the proper proportions of product with water and the other ingredients. Agitate and let stand for one hour. If a precipitate forms, apply the products separately. DO NOT reuse container.

**Liquid Fertiliser Tank Mixes:** Mix the product with liquid fertiliser, agitating to thoroughly disperse the elements. This can be achieved by adding product to the mixing batch tank or inducing through a pump. When mixing in batch tank, add product to water or nitrogen solution before adding phosphate material. This product can be mixed with liquid starter fertilisers.

#### 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 at ambient temperatures. 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.

#### PRECAUTIONS

May be harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid breathing vapours. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling. Contains ammonia. Contents may be under pressure. Use caution when opening.

#### FIRST AID

**If in Eyes:** Flush with clean running water for at least 15 minutes. If irritation persists, get medical attention. **If on Skin:** Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, or if rash develops, get medical attention.

**If Swallowed:** If conscious, drink 1 or 2 glasses of water. Get medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

**If Inhaled:** Remove to fresh air. If irritation persists, get medical attention.

#### SAFETY DATA SHEET

Additional information is listed in the safety data sheet, which is available from the supplier.

**CONDITIONS OF SALE:** The use of this product is beyond the control of Nutrien Ag Solutions Limited. Any provisions or rights under the Australian Consumer Law which cannot be excluded by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies expressed or implied under common law, statute or otherwise, in relation to the sale, supply, storage, use or application of this product are excluded. Nutrien Ag Solutions Limited does not accept any liability (including consequential loss and/or negligence) for any loss or damage connected with the sale, supply, storage, use or application of this product except for liability which cannot be excluded by statute.

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

IN A TRANSPORT EMERGENCY  
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POLICE OR FIRE BRIGADE

FOR SPECIALIST ADVICE IN  
AN EMERGENCY DIAL  
**1800 033 111**  
24 HOURS AUSTRALIA WIDE