



A NITROGEN AND POTASSIUM FERTILIZER SOLUTION

GUARANTEED ANALYSIS

Total Nitrogen (N) .....	2.00%
2.00% Urea Nitrogen	
Soluble Potash (K <sub>2</sub> O) .....	25.00%

Derived From: Urea and Potassium Acetate

F1548  
FOR AGRICULTURAL AND PROFESSIONAL USE ONLY

KEEP OUT OF REACH OF CHILDREN



WARNING

Avoid prolonged or repeated contact with eyes, skin and clothing. Chemical goggles or a full-face shield should be worn. To protect skin wear appropriate protective equipment, such as rubber or plastic aprons, rubber gloves and boots. Avoid breathing mist or vapor. Keep containers closed. Wash thoroughly after handling. May cause gastrointestinal distress if swallowed.

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.

READ LABEL CAREFULLY

PRECAUTIONARY STATEMENTS

Avoid prolonged or repeated contact with eyes, skin and clothing. Chemical goggles or a full-face shield should be worn. To protect skin wear appropriate protective equipment, such as rubber or plastic aprons, rubber gloves and boots. Avoid breathing mist or vapor. Keep containers closed. Wash thoroughly after handling. May cause gastrointestinal distress if swallowed.

EQUIPMENT

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

COMPATIBILITY

LOKOMOTIVE can be applied alone or with other compatible spray materials. Ammonium polyphosphate fertilizers 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. Fertilizer based mixtures that also contain pesticides should be sprayed as soon as possible.

Note: When combining LOKOMOTIVE with phosphate fertilizers vigorous agitation is required for good product mixing. See mixing directions below for more information.

CROP SAFETY

This product has been tested on a number of crop varieties with no phytotoxicity observed at labeled rates; however, this product has not been tested on all varieties and cultivars. Due to the large number of plant species and their associated varieties or cultivars, and due to variable growing conditions, it is impossible to test every plant for tolerance to this product. It is the responsibility of the user to determine if this product can be used safely prior to commercial use. In a small test area, test the specified rates on plants for phytotoxicity prior to general use. Before using any tank mix, test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application. Treat a small group of target crop including plant cultivars and evaluate for 3 to 7 days prior to making an application to your entire crop.

MIXING INSTRUCTIONS

1. Add LOKOMOTIVE to water and start agitation.
2. Add pesticides or other nutrients.
3. Fill tank and agitate thoroughly.

GENERAL INFORMATION

LOKOMOTIVE® is a clear liquid solution, containing 2% Nitrogen (N) and 25% potash (K<sub>2</sub>O). LOKOMOTIVE increases stress tolerance and root growth. Potassium Acetate is quickly absorbed by the root and leaf. LOKOMOTIVE may be applied by sprinkler or flood irrigation. It may be blended with other fertilizers or applied as a foliar treatment on selected crops. When used as a foliar fertilizer, LOKOMOTIVE should first be diluted with water before applying. Blends of LOKOMOTIVE should not be acidified below a pH of 6.0. LOKOMOTIVE is compatible with urea solutions in any ratio. When blending with micronutrients and pesticides, trial blends should be conducted before beginning large scale mixing. When mixing other liquid fertilizers and/or pesticides with LOKOMOTIVE, the blend sequence should be as follows: water, pesticide, LOKOMOTIVE and/or other fertilizer.

DO NOT APPLY NEAR WATER, STORM DRAINS, OR DRAINAGE DITCHES. DO NOT APPLY IF HEAVY RAIN IS EXPECTED. APPLY THIS PRODUCT ONLY TO YOUR LAWN/GARDEN, AND SWEEP ANY PRODUCT THAT LANDS ON THE DRIVEWAY, SIDEWALK, OR STREET, BACK ONTO YOUR LAWN/ GARDEN.

NOTE: When used as directed this product does not supply all nutrients required by plants and is to supplement a soil fertility program based on soil tests.

GENERAL APPLICATION AND USE RECOMMENDATIONS

LOKOMOTIVE may be applied to a wide variety of agricultural crops. Potassium requirements for most crops increase dramatically during periods of rapid growth and fruit development. Application of LOKOMOTIVE should be made based on soil and/or plant tissue analysis for potassium.

RATES: DIRECTIONS FOR USE

Crop	Foliar Applied Rate
(01) Root and Tuber Vegetables including Carrot, Onion, Potato, Sugarbeet, etc.	2.0 to 8.0 qts/a prior to row canopy closing
(04) Leafy Vegetables including Celery, Head and Leaf Lettuce, etc.	1.0 to 6.0 qts/a starting at thinning
(05) Brassica Vegetables including Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collards, etc.	1.0 to 8.0 qts/a at bloom establishment
(06) Legume Vegetables including all Beans, Soybeans, etc.	2.0 to 4.0 qts/a starting early bloom
(08) Fruiting Vegetables including Eggplant, Peppers, Tomato, etc.	2.0 to 8.0 qts/a starting at fruit formation
(09) Cucurbits including all Cucumber, Melons, Squash, etc.	1.0 to 8.0 qts/a from bud formation to fruit establishment
(10) Citrus Fruits including Lemons, Limes, Oranges, etc.	1.0 to 6.0 qts/a starting at fruit set
(11) Pome Fruit including Apple, Pear, etc.	1.0 to 6.0 qts/a starting at fruit set
(12) Stone Fruit including Cherry, Peach, Plum, etc.	1.0 to 8.0 qts/a starting at fruit set
(13) Berry and Small Fruit including Blueberry, Caneberries (Blackberry, Raspberry), Strawberry, etc.	1.0 to 8.0 qts/a starting at fruit set
(13) Berry and Small Fruit including Grape, etc.	1.0 to 8.0 qts/a starting at fruit set through verasion
(14) Tree Nuts including Almond, Hazelnut, Pecan, Pistachio, Walnut, etc.	2.0 to 6.0 qts/a starting at nut set or shell expansion
(15) Cereal Grains including Corn, Grain Sorghum, Rice, Wheat, etc.	2.0 to 6.0 qts/a from early vegetative through flowering or tassel
(16) Forage Fodder and Straw of Cereal Grains including Grasses, etc.	2.0 to 6.0 qts/a
(17) Grass forage Fodder and Hay including Grasses Grown for Seed	2.0 to 6.0 qts/a
(18) Animal Feed, Non Grass including all Alfalfa, Clover, etc.	2.0 to 6.0 qts/a at crown green up or after cutting
(20) Oilseed including Canola, Cotton, Sunflower, etc.	2.0 to 8.0 qts/a at bud to bolting stage
(99) Misc including Asparagus, Artichoke, Avocado, Flax, Hops, Mint, Olive, Peanut, etc.	1.0 to 8.0 qts/a
(99) Misc including Tobacco	2.0 to 4.0 qts/a prior to tasseling (Do not apply with alcohol based sucker control products)

FERTIGATION FLOOD AND FURROW IRRIGATION

Trees and Vines: Apply 10.0 to 15.0 gallons of LOKOMOTIVE per acre per application beginning at full leaf, schedule as needed. Vegetables and Row Crops: Apply 10.0 to 15.0 gallons of LOKOMOTIVE per acre per application, make second application based on crop requirements. Lokomotive may be applied to banded or in furrow at planting from 2 to 6 quarts per acre in corn and root and tuber vegetables.

SPRINKLER IRRIGATION

Trees (Under): Apply 5.0 to 15.0 gallons per acre per application every 10 to 14 days based on crop requirements. Trees (Overhead): Apply 2.0 to 10.0 gallons per acre based on soil levels and on crop requirements. Vines: Apply 3.0 to 5.0 gallons per acre per application every 10 to 14 days based on crop requirements. Vegetable and Row Crops: Beginning at the 3rd to 4th leaf stage, apply 3.0 to 10.0 gallons per acre per application every 10 to 14 days based on crop requirements. After injection, allow enough irrigation time to rinse the plants of any residual fertilizer.

CENTER PIVOT

Vegetable And Row Crops: Apply 3.0 to 5.0 gallons of LOKOMOTIVE per acre per application as needed based on crop requirements. When mixing LOKOMOTIVE or any liquid fertilizer with pesticides always keep agitators running during filling and spraying operations. Failure to maintain agitation may cause separation of products resulting in uneven spray application. Sprinkler application of LOKOMOTIVE and other liquid fertilizers over an established crop may cause foliar injury to a crop if: injection period is short enough to cause an excessive amount of fertilizer to accumulate on the leaves, temperatures are above 90 °F and humidity less than 30%, fertilizer rates are higher than recommended, irrigation pump breaks down during or immediately after injecting fertilizer, and/or any combination of these conditions. Crop injury may result from unusual weather conditions, failure to follow label directions, or improper application practices all of which are out of control of the manufacturer or seller. The directions on this label are believed to be reliable and should be followed carefully.

TURF

Apply with 1.0 to 2.0 gallons of water per 1000 square feet. For best results, apply early in the morning or late evening and allow to dry on the turf for 3 to 6 hours before irrigation. Turf can be mowed anytime after the first irrigation.

Ounces per 1000 Sq Ft	Gallons per Acre	Pounds K <sub>2</sub> O per 1000 Sq Ft
7.4	2.5	0.15
14.8	5.0	0.30
22.2	7.5	0.45
29.6	10.0	0.60

NURSERY AND ORNAMENTALS

Foliar Feeding: Rate: 4.0 quarts, mix with 100 gallons of water and spray to run off.  
Soil Drench: Rate 6.0 quarts, dilute with 100 gallons of water and apply sufficient amount to moisten the root zone.  
Transplanting: Rate 6.0 quarts, dilute with 100 gallons of water and apply to root ball or back-fill at the time of planting. Apply 1.0 gallon of solution per 1 inch of trunk caliper.

HANDLING AND STORAGE

Minimize skin exposure. Store mini-bulks and smaller containers out of the sun in an area of moderate temperature. Do not re-use containers. Avoid containers, piping or fittings made of copper-containing alloys or galvanized metal. Do Not store at temperatures below 0 °F, as crystallization may occur. Dispose of containers in accordance with local regulations and requirements. IN CASE OF SPILL: Contain spill and maximize recovery. Keep spill out of water sources. Exercise caution in area of spill for slippery conditions. Dispose of spilled material in accordance with regulatory requirements.

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-ipi.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.

LoKomotive 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](http://www.P65Warnings.ca.gov).

Density: 10.85 lbs/gallon @ 68° F

Liquid Measure: 275 gallons (1,041 liters)

Net Weight: 2,983.75 lbs (1,353.41 kg)

Product Code: 1000079656

Density: 10.85 lbs/gallon @ 68° F

Liquid Measure:                      gallons (                      liters)

Net Weight:                              lbs (                              kg)

Product Code: 1000079658