



0-50-33

A SUPERIOR WATER SOLUBLE FERTILIZER FOR FOLIAR FEED, FERTIGATION INGREDIENT AND SPECIAL SOIL APPLICATIONS



WILBUR-ELLIS

Ideas to Grow With

GUARANTEED ANALYSIS

Available Phosphate (P2O5) ..... 50.00%
Soluble Potash (K2O)..... 33.00%

DERIVED FROM: Monopotassium Phosphate.

KEEP OUT OF REACH OF CHILDREN PRECAUTION

Do not ingest. Avoid contact with skin, eyes or clothing. Avoid breathing dust, vapor or mist.

FIRST AID

In all cases, call a poison control center or doctor for further treatment advice.

IF SWALLOWED, call a poison control center or doctor immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person. IF ON SKIN, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. IF INHALED, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration. IF IN EYES, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.

For chemical spills, leaks, fire or exposure, call CHEMTREC: (800) 424-9300.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Store in a safe manner. Store in original container only and keep tightly sealed when not in use. Dispose of unused product and empty containers in accordance with federal, state and local regulations.

GENERAL INFORMATION

MORA-LEAF P&K is formulated primarily for foliar applications to prevent or correct phosphorus and potassium deficiencies in a wide range of agronomic and ornamental plants. Its use is suggested as a supplement to a regular, balanced fertilizer program to enhance yields and improve quality. Application of MORA-LEAF P&K is a means of obtaining a quick response to needed elements. Foliar applications of MORA-LEAF P&K may be particularly beneficial during periods of peak nutrient demand, for crops grown on soils having poor nutrient availability or to crops suffering from a weakened root system.

Avoid foliar nutrient applications to crops during periods of moisture, salinity or heat stress. Applications of foliar nutrients to sensitive crops such as leafy vegetables or soft-skinned fruit during periods of excessive temperatures may cause cosmetic injury.

MORA-LEAF P&K should be used as part of a comprehensive Total Nutrition System for optimizing plant growth, development, yield and quality.

DIRECTIONS FOR USE

MORA-LEAF P&K may be applied as a foliar spray by air or by ground. Maintain agitation to provide uniform distribution within the spray tank. Thorough and even spray coverage is essential for maximum nutrient uptake and crop safety. Always include a high quality wetting agent, such as R-11 or SYL-COAT, at recommended rates.

Optimum rate of application will vary based on a variety of factors including degree of need or deficiency, growth stage, yield potential, environmental conditions, existing soil fertility levels, etc.

Add MORA-LEAF P&K to spray tank that is at least 50% full with water and maintain agitation. MORA-LEAF P&K should dissolve rapidly and distribute uniformly. When water temperatures are cold, allow extra time for this product to completely dissolve. Do not exceed 2 pounds MORA-LEAF P&K per gallon of water. Unless otherwise specified on tank-mixed pesticide labels, add pesticide last. When combining with products packaged in water soluble pouches, allow pouches to dissolve completely before adding nutrients.

Information regarding the contents and levels of metals in this product is available on the Internet at http://www.aapfco.org/metals.html

COMPATIBILITY

MORA-LEAF P&K is compatible with many co-applied nutrients and plant protection products. Always jar test new combinations for compatibility prior to field mixing. MORA-LEAF P&K is formulated to achieve an acidic spray solution. Final spray solution pH will vary depending on rate, water volume and water quality. Do not combine with copper plant protection products if spray solution has a pH of 7.0 or less. Avoid tank mixing with liquid lime sulfur. Do not apply with amine form of 2,4-D or Banvel.

SUGGESTED USES

FOLIAR FEEDING: Split applications and concentrate sprays typically result in better response. Suggested timings are general and typical; use during other times of the growing season may be beneficial, especially if indicated by a tissue analysis.

SOIL APPLICATIONS: MORA-LEAF P&K may be water run through open or closed irrigation systems. Dissolve thoroughly and then meter or inject at the desired rate.

See page 2 of label for table of more SUGGESTED USES.

Conditions of Sale and Limitation of Warranty and Liability:

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using the product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of the product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of many different factors including, without limitation, manner of use or application, weather, combination with other products, or crop conditions. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Manufacturer and Seller harmless from any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label. EXCEPT FOR THIS WARRANTY, THE PRODUCT IS FURNISHED "AS-IS," AND NEITHER SELLER NOR MANUFACTURER MAKES ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE SELECTION, PURCHASE OR USE OF THIS PRODUCT; SELLER AND MANUFACTURER SPECIFICALLY DISCLAIM ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Buyer and User accept all risks arising from any use of this product, including without limitation uses contrary to label instructions, under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) Seller or Manufacturer.

To the extent permitted by law, neither Manufacturer nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE BUYER OR USER, AND THE EXCLUSIVE LIABILITY OF MANUFACTURER AND SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT, OR, AT THE ELECTION OF MANUFACTURER OR SELLER, THE REPLACEMENT OF THE PRODUCT.

These Conditions of Sale and Limitation of Warranty and Liability shall be interpreted in accordance with the laws of the State of California, excluding its conflicts of laws rules, and may not be amended by any oral or written agreement.

WILBUR-ELLIS logo, Ideas to Grow With, MORA-LEAF P&K, R-11, and Total Nutrition System are registered trademarks, and MORA-LEAF logo and SYL-COAT are trademarks of Wilbur-Ellis Company LLC. Banvel is a registered trademark of BASF Corporation. K-081517

Manufactured by: WILBUR-ELLIS COMPANY LLC 7 E. Washington Ave., Yakima, WA 98903

NET WEIGHT: 25 POUNDS (11.34 kg)

**DECIDUOUS FRUIT**

CROP	TIMING	RATES
Including but not limited to APPLES, PEARS*, CHERRIES, PRUNES, APRICOTS, PEACHES, PLUMS, NECTARINES *PEARS – When daytime temperatures are expected to exceed 90°F do not use more than 8 pounds per acre.	Apply pre-bloom and post-bloom sprays.	<ul style="list-style-type: none"> <li><b>Concentrate:</b> Use a maximum of 10 pounds per acre per application in a minimum of 20 gallons of water.</li> <li><b>Dilute:</b> 1½ - 2½ pounds per 100 gallons of water, maximum of 10 pounds per acre per application.</li> </ul>
<p><b>PRECAUTIONS FOR DECIDUOUS FRUIT:</b> Do not apply under poor drying conditions such as fog, rain or cool temperatures and high humidity. Do not apply with any materials that may cause russetting. Silicone surfactants should be limited to 4 ounces/100 gallons on cherries, nectarines, pears and table grapes.</p> <p>Keep a minimum of 7 days between applications. Do not spray trees under stress. With rising temperatures (a.m.) stop spraying at 84°F. With falling temperatures (p.m.) start spraying at 90°F. Under certain conditions, including handgun applications, MORA-LEAF P&amp;K can cause leaf burn. To reduce chance of foliage injury be sure to use enough gallonage with dilute sprays to cause runoff (350 gpa) and correct gallonage with concentrate sprays to not have it run or form a drip on the tree. Be sure to avoid overlap spraying when treating young or dwarf blocks. All gallonages stated are based on spray volume being applied on full-size trees. Proper sprayer calibration is important to reduce chance of injury.</p>		

**NUT CROPS**

CROP	TIMING	RATES
Including but not limited to ALMONDS, PISTACHIOS, WALNUTS, PECANS, FILBERTS	<ul style="list-style-type: none"> <li><b>Bloom Spray:</b> Apply 1-3 times from 2 weeks before to 2 weeks after peak bloom or when sufficient leaf area is present to absorb nutrients or 1-4 times after nut set.</li> <li><b>Finish Spray:</b> Apply 1-2 times from 3 weeks to 10 days before harvest.</li> </ul>	<ul style="list-style-type: none"> <li><b>Bloom Spray:</b> Use 5-10 pounds per acre per application.</li> <li><b>Mid-Season Spray:</b> Use 5-15 pounds per acre in 100-300 gallons of water.</li> <li><b>Finish Spray:</b> Use 5-15 pounds per acre per application. Use a minimum of 2 gallons of water per pound by ground or 1 gallon per pound by air.</li> </ul>

**CITRUS**

CROP	TIMING	RATES
Including but not limited to ORANGES, LEMONS, GRAPEFRUIT, TANGERINES	<ul style="list-style-type: none"> <li><b>Pre-Bloom and Post-Bloom Sprays:</b> Apply 1-5 times during bloom period.</li> <li><b>Mid-Season Spray:</b> Use as often as every 10 days.</li> </ul>	<ul style="list-style-type: none"> <li><b>Bloom Spray:</b> Use 3-4 pounds per 100 gallons of water, maximum 16 pounds per acre per application.</li> <li><b>Concentrate:</b> Use a maximum of 12 pounds per acre per application in a minimum of 12 gallons of water.</li> <li><b>Mid-Season:</b> Use 5-15 pounds per acre each application in a minimum of 1 gallon of water per pound of product.</li> </ul>

**GRAPEVINES**

CROP	TIMING	RATES
Including but not limited to WINE, TABLE, RAISIN GRAPES	<ul style="list-style-type: none"> <li><b>Pre-Bloom and Post-Bloom Spray:</b> Apply 1-6 times starting 2 weeks before peak bloom and continuing as often as every 7 days.</li> <li><b>Mid-Season:</b> Use as often as every 10 days.</li> <li><b>Finish Spray:</b> Apply 1-2 times from 3 weeks to 5 days before harvest. Split applications should be made 7-10 days apart.</li> </ul>	<ul style="list-style-type: none"> <li><b>Bloom Spray:</b> Use 3-10 pounds per acre per application.</li> <li><b>Finish Spray:</b> Use 5-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.</li> </ul>

**VEGETABLE CROPS**

CROP	TIMING	RATES
PRODUCE including but not limited to ICEBERG LETTUCE, CELERY, COLE CROPS, LEAFY VEGETABLES	Use multiple low-rate applications 10-14 days apart starting just after transplant or thinning. Pre-harvest application from 3-14 dbh may influence better color.	Use 1-2 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
MELONS and CUCURBITS including but not limited to CANTALOUPE, HONEYDEW, MUSK MELONS, CUCUMBERS, PUMPKINS, SQUASH	Use multiple applications 2-3 weeks apart starting just prior to bloom or beginning at first fruit set and continuing until harvest.	Use 5-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
TOMATOES and PEPPERS including but not limited to FRESH or PROCESSING	Use 1-3 applications 2-3 weeks apart starting at first bloom. Apply again 1-2 times 21 and 10 days before harvest.	Use 5-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.

**FIELD CROPS**

CROP	TIMING	RATES
ALFALFA and CLOVER	<b>First Regrowth:</b> Apply when alfalfa is 6-8 inches tall and after each cutting.	Use 2-8 pounds per acre per application. Can be applied after cuttings at maximum concentration of 1.9 pounds/acre if label mixing directions are followed.
BEANS including but not limited to DRY, SUCCULENT, LIMAS	Apply at bud stage when leaves are large enough to absorb a foliar feed, through early bloom.	Use 5-8 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
ROOT CROPS including but not limited to CARROTS, BEETS, SWEET POTATOES	Apply at increasing rates from early root swell through pre-harvest.	Use 2-8 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
POTATOES	Apply at early initial tuber formation. Subsequent applications can be made with various fungicide and/or insecticide cover sprays. Consult your fieldman for specific recommendations.	Use 5-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
ONIONS and GARLIC including but not limited to FRESH and DRY	On transplants starting at 14 days after planting.	Use 2-8 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
SUGAR BEETS	Apply when leaves are 10 inches across and again 3-4 weeks later. Apply again 4 weeks to 2 weeks before harvest.	Use 5-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
CORN (FIELD and SWEET)	Apply at tassel, early silk and again during ear filling.	Use 5-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
COTTON	Apply early during each bloom period or 3-4 times at 12 to 14-day intervals after first bolls appear.	Use 5-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
HOPS	Begin application at early season training and continue through end of bloom period as often as every 7 days.	Use 5-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
LEGUMES including but not limited to PEAS (DRY and SUCCULENT), LENTILS, GARBANZOS	Apply at bud stage when leaves are large enough to absorb a foliar feed, through mid bloom.	Use 2-8 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
MINT	Begin applications after 6-8 inches of regrowth and continue as often as every 7 days as needed.	Use 2-10 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.
SMALL GRAINS including but not limited to WHEAT, OATS, BARLEY	Apply at tillering and before early boot stage.	Use 2-8 pounds per acre per application. Use a minimum of 2 gallons of water per pound of product by ground or 1 gallon per pound by air.

**TURF AND ORNAMENTALS**

CROP	TIMING	RATES
COOL SEASON GRASS including but not limited to BENTGRASS, FESCUE, BLUEGRASS	Use during the prime growing season, spring and fall, at high rates to encourage vigorous growth prior to the heat of summer and semi-dormancy or dormancy of winter. Apply as often as once per week and in conjunction with pesticide applications when applicable.	Use 2-4 ounces per 1,000 sq. ft. per application. Use a minimum of 2 gallons of water per pound of product.
WARM SEASON GRASS including but not limited to BERMUDA GRASS	Use during the prime growing season, late spring through early fall, at high rates to encourage vigorous growth prior to the heat of summer and to encourage rapid spring regrowth. Apply as often as once per week and in conjunction with pesticide applications when applicable.	Use 2-4 ounces per 1,000 sq. ft. per application. Use a minimum of 2 gallons of water per pound of product.
ORNAMENTALS including but not limited to TREES, SHRUBS, BEDDING PLANTS, CONTAINER PLANTS.	Use at bloom, spring shoot push or shortly after transplant and repeat in 14-21 days. Use any time new growth is pushing or in conjunction with pesticide applications.	Use 1 pound in 10 gallons of water and spray to wet.

- **FERTIGATION VIA MICRO IRRIGATION OR SPRINKLER:** Use as an augmentation or substitution for any phosphate and potassium fertilizer when a low salt index is desirable. MORA-LEAF P&K acts as a buffer at concentrations of as little as 0.25%. This may enhance its solubility and availability when added to alkaline irrigation water. Rates and timing should follow standard practice and may range from 25-500 pounds per acre.
- **DIRECT SOIL APPLICATIONS:** Best results will be obtained with a band application as a starter or side-dress. Because MORA-LEAF P&K has a low salt index, it may be placed in close proximity to the seed at rates of 2-10 pounds per acre in no less than 5 gallons of water. Some crops may tolerate the product used in its dry form in seed row applications. Consult your crop advisor or Wilbur-Ellis Company representative for information regarding dry application.