

ISO NPK®

3-1-3 FOR ORGANIC PRODUCTION



ISO NPK® 3-1-3 FOR ORGANIC PRODUCTION is designed to deliver nitrogen, phosphorus and potassium efficiently to optimize nutrient levels to enhance rooting, blossoms, fruit yields and quality. Use ISO NPK® 3-1-3 FOR ORGANIC PRODUCTION in addition to a primary fertility program.

GUARANTEED ANALYSIS:

Total Nitrogen (N)	3%
3% Water Soluble Nitrogen	
Available Phosphate (P ₂ O ₅)	1%
Soluble Potash (K ₂ O)	3%

Derived from: Sulfate of Potash, Soy Protein Hydrolysate, Fermented Guayule Extract and Hydrolyzed Fish & Phosphoric Acid (as stabilizer)

Directions: For Commercial Application Only. For most crops, apply (4 oz to 16 oz./acre) 1 to 2 times per crop cycle, 7 – 21 days apart. Product can be soil applied, foliar applied, or fertigated (Drip, Sprinkler or Flood). To optimize performance for specific crops, see CROP SPECIFIC DIRECTIONS.

Hazard Classification: This product is not classified as a hazardous chemical under OSHA Hazard Communication Standard (29 CFR 1910.1200 (HCS))

Precautionary Statements: Wash face, hands and any exposed skin thoroughly after handling. Do not breathe spray. Wear protective gloves, clothing and eye protection. If swallowed, rinse mouth. Do not induce vomiting. Dispose of contents/container according to regulations.

Density: 11.09 lbs/gallon at 68°F

Net Contents and Net Weight:

___ 1 pint (497 mls); 1.39 lbs. (0.62 kgs); ___ 2.5 gallons (9.46 liters); 27.72 lbs (12.32 kg) ; ___ 275 Gallon Tote (1,041 liters); 3,050 lbs (1,355 kg)



Manufactured by: Beem Biologics, Inc. 38768 W. Farrell Road, Maricopa, AZ 85138 | Info@beembilogics.com | 520-464-9070

Order and Service Desk: 520-464-9070, info@beembilogics.com

CROP SPECIFIC DIRECTIONS for the application of ISO NPK® 3-1-3

ALFALFA: Summer Cuttings: Apply 1/2-pint per acre (8oz) in spring and 1/2 pint (8oz) every other cutting to a maximum of 2 pints for crop year. Apply as a fertigation or foliar application after cutting and removal of cut hay.

CORN and Sorghum: Apply 2 oz per acre In-Furrow followed by . Apply 6 oz per acre 2nd – 3rd Node. For single application, apply 8 oz at 2nd - 3rd Node. Late season, apply ½ pint per acre (8 oz) at Flagleaf or pre-tassel thru fertigation or foliar. Total application should not exceed 1-pint per acre per crop cycle.

CEREAL GRAINS, such as Barley, Buckwheat, Canola, Hops, Millet, Oats, Popcorn, Rice, Rye Sesame, Wheat, and Wild Rice: Apply ½-pint per acre (8 oz) as a fertigation or foliar application at tillering (3-6 leaf stage). Total applications should not exceed 1 pint per acre per crop cycle.

CITRUS, such as Calmondin, Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange (sour and sweet), Pummelo, and Tangerine: Apply 1/2 pint per acre (8oz) as a fertigation or foliar application at pre-bloom or one time between full bloom and petal fall. Repeat application during the early sizing period 2 weeks after petal fall. **FOR YOUNG TREES:** Apply ½ pint per (8 oz) acre in spring and ½ pint per acre in fall for growth.

COTTON: FULL SEASON, IRRIGATED COTTON. Apply 1-pint per acre (16 oz) as a fertigation or side dress at pinhead square and a second 1-pint application 21 days later.. Apply 8 oz per acre foliar application at pinhead square and a second 1-pint application 21 days later. For In-Furrow application, apply 2 oz per acre then follow with a 1/2-pint per acre (8 oz) application at pin square by fertigation, side dress or foliar. Total application should not exceed 2-pints per acre. **DRYLAND COTTON:** Apply 2 oz per acre In-Furrow, OR apply 8 oz per acre at pinhead square and a second 8 oz application 21 days later.

COLE CROPS, such as Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage (Chinese), Cauliflowers, Cavalo Bracolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens: Apply 4 oz per acre as a fertigation or foliar application 2-3 days after transplanting or at 2-3 true leaf stage followed by a second application 10-14 days later. For heading crops such as Broccoli, Cauliflowers, and Brussel Sprouts, apply 4 oz at pre-bloom and repeat application during early head sizing period for 1 additional application.

CUCURBIT VEGETABLES such as Cantaloupe, Chayote, Chinese Waxgourd, Citron Melon, Cucumbers, Gherkin, Edible Gourds, Muskmelon, Pumpkin, Summer Squash, Watermelon, and Winter Squash: Apply 4 oz per acre as a fertigation or foliar application when plants are 3-5 leaf stage or 3-4 days after transplanting. Apply 8 oz per acre at first flower (e.g. first male for cantaloupe). Repeat 14 to 21 days later for last application. Do Not exceed 1 pints per acre over crop cycle.

FRUITING VEGETABLES such as Eggplant, Groundberry, Pepino, Peppers (such as Bell, Chile, Pimento and Sweet Peppers), Tomatillo and Tomatoes: Apply 4 oz per acre as a fertigation or foliar application when plants are 4-6 leaf stage or 3-4 days after transplanting. Apply 4 oz per acre at first flower and again 14 to 21 days later. Do not exceed 16 oz per acre over the crop cycle.

GRAPES, such as Dried, Raisin, Seedless, and Seeded Table Grapes: Apply 8 – 16 oz per acre as a fertigation or foliar application, not to exceed 32 oz per crop cycle. For Seedless and Seeded Grapes apply after thinning and bloom set has past. Apply second application 14 – 21 days after first application.

GRAPES (Wine): Apply 8 - 16 oz per acre as a fertigation or foliar application, followed by a second 8 - 16 oz application in 14 - 21 days after first application. For Seeded Grapes, apply at the start of bloom. Total applications should not exceed 32 oz per acre per crop cycle.

HOPS, all varieties: Apply 12 oz. per acre early growth stage via drip irrigation, followed by 16 oz. per acre med to late growth stage. Apply 16 oz per acre foliar at early lateral development.

LEAFY VEGETABLES such as Amaranth, Arugula, Asparagus, Cardoon, Celery, Celtuce, Chervil, Chrysanthemum, Corn Salad, Cress (garden and upland), Dandelion, Dock, Endive, Fennel, Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio, Rhubarb, Spinach, and Swiss Chard: Apply 4 oz per acre by fertigation or foliar application when plants are at least 3-5 leaves or post transplanting by 3-4 days. NOTE: Applications in excess of 1 pint per acre can cause a delay to harvest.

PINEAPPLES: Apply 1-pint per acre by fertigation or foliar application 18 days after floral induction. Repeat in 30 days. Best performance is achieved with 2-pints over the crop cycle.

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Keep space around the seal equal to 25% the size of the seal.



POME FRUIT such as **Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental), Quince:** Apply 8 oz per acre by fertigation or foliar application. Apply foliar with early sizing sprays post bloom. Use at bloom for Crabapple pollinators. Do not exceed a total of 1-pint per acre over the crop cycle.

POTATOES, ROOT AND TUBER VEGETABLES such as **Arracha, Arrowroot, Artichoke, Canna (edible), Cassava, Chayote (root), Garlic, Ginger, Onion, Potato, Sweet Potato, Tanier, Yam Bean, Yam Root Vegetables** such as **Beet (garden & sugar), Burdock (edible), Carrot, Celeriac, Chervil, Chicory, Ginseng, Horseradish, Parsnip, Rutabaga, Salsify, Skirret, and Turnip:** Apply 4 oz per acre by fertigation In-Furrow. Apply 12 oz at Hilling by fertigation or foliar (early leaf stages). Maximum of 1.5-pints per acre over the crop cycle.

SOFT FRUIT: Blueberry; Caneberry such as, **Raspberry (Red & Black), etc.** Apply via drip irrigation or foliar at 8-16 oz per acre starting at pre-bloom followed 2-3 weeks after second application (typically petal fall to early sizing. Depending on varieties a third application at least two weeks after second application or no later than 2 weeks pre-harvest.

STRAWBERRIES: Apply 2 - 4 oz. per acre through fertigation every 7-14 days starting 1-week after transplanting. When flower buds begin apply 2 - 4 oz by foliar or drip application every 7-14 days.

STONE FRUIT such as **Apricot, Cherry (sweet & tart), Nectarine, Peach, Plum, Plumcot, Prune (dry and fresh types):** A total of 3 applications is suggested. Apply 8 oz per acre by fertigation or foliar method at early pink or red bud stage. Apply 4 oz per acre at petal fall. Apply 4 oz per acre final application 2-3 weeks later. Do not exceed 1 pint per acre per season.

SOYBEANS, SUCCULENT, DRIED BEANS AND PEAS such as **Beans (Phaseolus and Vigna spp.), Jackbean, Pea (pisum spp.), Pigeon Pea, Sword Bean, and Dried Cultivars of Bean (lupines, Phaseolus, Vigna spp.), Broad Bean, Chickpea, Guar, Lablab Bean, Lentil and Pea:** Apply 2 oz per acre In-Furrow. Followed by 4 oz per acre application 3-5 Trifoliates stage. OR apply 4 oz per acre at very early vegetative stages such as 3-5 trifoliates or in early reproductive stages followed by 4 oz per acre 14-21 days later. Do not apply more than 8 oz per crop cycle.

TREE NUTS, ALMOND AND PISTACHIO, such as **Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory Nut, Macadamia Nut, Pecan, Walnut (Black and English), and Pistachio:** Apply 1 (16 oz.) per acre by fertigation or foliar method at the "pink" stage for Almonds. Apply at early flower on other Nut and Pistachio Crops. Apply at a second application of 8 oz per acre after petal fall. Apply a maximum of 2 pints per acre over the crop cycle.

TROPICAL TREE FRUITS such as **Avocado, Cherimoya, Coffee, Guava, Lychee, Mango, and Papaya:** Apply 8 oz per acre by Foliar method at early pre-flowering to first flower. Repeat 8 oz Foliar application prior to summer nut drop or following a cold snap or hail or excessive rains. Do not apply more than 1-pint per acre over crop cycle.

Contact a representative of Beem Biologics for additional information on use directions (520-464-9070) or info@beembiotics.com

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.

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.aapfco.org/metals.htm>

Notice: *Neither the manufacturer or the seller make any warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all responsibility for safety and use not in accordance with directions.*



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