

SOUTHERN[®]
AG

COMMERCIAL PRODUCT GUIDE

HERBICIDES INSECTICIDES FUNGICIDES ADJUVANTS
SOLUBLE FERTILIZERS NUTRITIONALS



SOUTHERN AGRICULTURAL INSECTICIDES, INC.

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ADJUVANTS

BLUE COLORANT

CONTAINS: A concentrated non-staining dye.
USE ON: Turf, non-crop areas, ornamental plants and in fertilizer injectors.
FOR: Spray pattern indicator or fertilizer injector tracer.
RATE: Hand Sprayer 1/2 - 1 TBS. per gallon or 8 oz to 1 quart per acre.
See label for fertilizer injector rates.
APPLICATION: To be mixed with pesticides or fertilizers in sprayers or injectors tanks.
PACKED: 12 x Qt. - #20893, 4 x Gal. - #20894

DEFOAMER

CONTAINS: silicone based anti foaming agent
USE ON: Agricultural and Ornamental spray tanks for reducing amount of foam in spray and dip tanks.
RATE: 1/4 to 1 oz. per 100 gallons of spray.
APPLICATION: Add to spray tank as needed to reduce foam.
PACKED: 12 x Qt. - #27003

HERBI - OIL 83-17

CONTAINS: Paraffin-based petroleum oils and a blend of oil soluble surfactants.
USE ON: Weeds with herbicide according to the label. Use with herbicides like POAST[®] Herbicide and Atrazine 4L Herbicide.
FOR: Increasing the effectiveness of herbicides.
RATE: 1% Emulsion or 1 1/4 oz. per gallon, 1 pt. in 12 1/2 gallons.
APPLICATION: Apply as a foliar spray with herbicides according to their label.
PACKED: 4 x 1 Gal. - #39734

SPREADER STICKER

CONTAINS: Modified phthalic glycerol alkyl resin, Octyl phenoxy polyethoxy ethanol and Isopropanol
USE: With almost all insecticide and fungicide sprays on Fruit, Ornamentals and Vegetables.
FOR:
1. Aids in spreading of spray material on waxy leaved plants such as Roses and Cabbage.
2. Helping to retain spray material from weathering due to rain and dew.
3. Increasing effectiveness of insecticide and fungicide sprays.
RATE: Use 3 pints (48 ounces) per 100 gallon of spray or 1 TBS per gallon.
PACKED: 4 x 1 Gal. - #57854

SURFACTANT FOR HERBICIDES

CONTAINS: 80% non-ionic Surfactant.
USE: With almost all herbicide sprays.
FOR: Reducing the surface tension of water to insure more uniform coverage and penetration of weed killers.
RATE: 1 pint per 100 gallons or 1 tsp. per gallon
PACKED: 4 x Gal. - #66754

FUNGICIDES

TURF FUNGICIDE GRANULAR

(BAYLETON[®] SYSTEMIC FUNGICIDE GRANULES)
CONTAINS: .5% Bayleton[®] on a granule base
USE ON: All Turf grasses.
CONTROLS: Curative; Dollar Spot, Brown Patch, Rusts, Powdery Mildew, and Anthracnose. Preventative; All above, Fusarium Blight, Summer Patch, Gray and Pink Snow Mold, Fusarium Patch, and Southern Blight.
RATE:
Preventative; 1.5 to 3 lb. per 1000 sq. ft.
Curative; 6 lb. per 1000 sq.
APPLICATION: For broadcast or spot treatment, spread evenly with spreader and water in lightly.
PACKED: 36 lb. bag- #20139

RD 20 DISINFECTANT

CONTAINS: 10% dimethyl benzylammonium chloride and 10% dimethyl ethylbenzyl ammonium chloride
USES:
Disinfecting greenhouse areas, pots and tools- 1 Tablespoon per gallon
Orchid Culture- 1-2 Tablespoons per gallon
Algae Control- 1 Tablespoon per gallon
Treat Seedlings & Bulbs- 1 Teaspoon per gallon
Other Usages- 1- 1.5 teaspoons per gallon
APPLICATION: Mix with water. Depending upon specific use this product may be used as a spray, dench, soak or a dip.
PACKED: 4 x 1 Gal. - #61554, 30 Gal. - 61559, 55 Gal. - #61556

HERBICIDES

2,4-D AMINE WEED KILLER

CONTAINS: 3.8 lbs. per gallon 2,4-D acid equivalent liquid concentrate in a low volatile amine form.
USE ON: Certain grasses in lawns, parks, golf courses, and pastures; fences, ditchbanks, non-crop sites, small grains, and corn
CONTROLS: Many Broad-leaved Weeds.
RATE: 2- 3 TBS in 3- 5 gallon to cover 1,000 sq. ft.
APPLICATION: Apply as a coarse low pressure spray, preferably with fan type nozzle. CAUTION: SPRAY TO ACCURATELY OBTAIN INDICATED COVERAGE WITHOUT OVERLAP. AVOID DRIFT TO SUSCEPTIBLE PLANTS.
PACKED: 4 x Gal. - #17384, 2 x 2.5 Gal. - #17408

SURFLAN[®] A.S.

CONTAINS: 40.4% Oryzalin
(4 lb. Surflan per gallon).

USE ON: Landscape ornamentals, Noncropland, Non-bearing trees and vines, Industrial sites, Established warm season turf, and other labeled areas.

CONTROLS: preemergent surface-applied herbicide for up to 8 month control of annual grasses and many broadleaf weeds from seed.

RATE:

Ornamentals: 1.5 - 3 oz. per 1000 sq. ft.

Turf: 1 - 1.5 oz per 1000 sq. ft.

(do not reseed for 90 - 120 days following application)

APPLICATION: Safe to spray over-the-top of listed ornamentals in sufficient water to cover area. May also be tank mixed with Round-up (direct spray away from plants) or Vantage (Poast).

PACKED: 12 x Qt. - #66823, 4 x Gal. - #66814

INSECTICIDES

CYGON[®] 2E DIMETHOATE SYSTEMIC INSECTICIDE NOT FOR RESIDENTIAL USE.

CONTAINS: 23% Dimethoate (2 lb./gal.).

USE ON: Ornamentals- Azaleas, Birch, Boxwoods, Camellias, Euonymus, Gladioli, Hemlock, Juniper and Roses.
Vegetables- Beans, Broccoli, Cauliflower, Endive, Kale, Leaf Lettuce, Mustard, Melons, Peas, Potatoes, Tomatoes, Spinach, Swiss Chard, and Collards.

CONTROLS: Aphids, Leaf Miners, Scale, Thrip, Mites, Leaf Hoppers.

RATE: 1 - 4 Tsp. per gallon or 1 -4 pints per acre.

See label for specific rate on specific crop.

APPLICATION: Mix with water. Apply as a thorough cover spray.

PACKED: 12 x Qt- 25413, 4 x Gal. - #25414

DELTA GUARD GC GRANULAR INSECTICIDE RESTRICTED USE PESTICIDE

CONTAINS: 0.1% Deltamethrin on granule dolomite base.

USE ON: Golf Courses, Sod Farms, Landscape Ornamentals Plantings and Perimeter around Commercial, Industrial, Recreational and Residential Areas.

CONTROLS: Ants, Armyworms, Chiggers, Chinch Bugs, Cockroaches, Crickets, Cutworms, Fire Ants, Spiders, Sod Webworms, Termites, Ticks and Mole Crickets

RATE: Turf; 2 - 3 lbs. per 1,000 sq. ft. See label for specific instructions.

APPLICATION: Spread evenly with spreader, water in thoroughly for most insects.

PACKED: 40 lb. bag- #30949

DURSBAN[®] 1% MOLE CRICKET BAIT

FOR USE ONLY ON GOLF COURSES, SOD FARMS, ROAD MEDIANS AND COMMERCIAL ORNAMENTAL NUSERIES

CONTAINS: 1% Chlorpyrifos Insecticide on an attractant feed base.

CONTROLS: Ants, Armyworms, Billbugs, Crickets, Earwigs, Grasshoppers, Mole Crickets and Sowbugs

RATE: 2.5 lbs. per 1,000 sq. ft.

APPLICATION: Apply evenly over area with a fertilizer spreader.

PACKED: 40 lb. - #30930

DURSBAN[®] 1% GRANULAR INSECTICIDE

FOR USE ON GOLF COURSES ONLY

CONTAINS: 1% Chlorpyrifos

USE ON: Golf Course Turf only

CONTROLS: Ants, Armyworms, Billbugs, Ticks, Crickets, Cutworms, Earwigs, Fleas, Sod Webworms and Grubs.

RATE: 2.5 lbs. per 1,000 sq. ft.

APPLICATION: Spread evenly with spreader, water in thoroughly for most insects.

PACKED: 40 lb. bag- #30949

DURSBAN[®] 2.5% GRANULAR INSECTICIDE

CONTAINS: 2.5% Chlorpyrifos

USE ON: Sod Farms, Golf Course Turf, Outdoor Areas around Industrial Plant Sites and Ornamental Nurseries for Commercial Production

CONTROLS: Many insects such as Ants, Armyworms, Billbugs, Ticks, Crickets, Cutworms, Earwigs, Fleas, Sod Webworms and Grubs.

RATE: Turf, Nursery, Industrial Plant Sites- 1 lbs. per 1,000 sq. ft. Fire Ant Control - 2 TBS per mound. Imported Fire Ant Control in Ornamental Nurseries - 1 lb. per cubic yard of media or 250 lbs. per acre.

APPLICATION: Turf- spread evenly with spreader, water in thoroughly for most insects.

PACKED: 50 lb. bag- #30958

DURSBAN[®] 2- E INSECTICIDE RESTRICTED USE PESTICIDE

CONTAINS: 24.7% Chlorpyrifos

USE ON: Sod Farms, Golf Course (Turf only), Road Medians, Around Industrial Plant Sites and in Nurseries for Commercial Production only.

CONTROLS: Many insects such as Ants, Armyworms, Billbugs, Ticks, Crickets, Cutworms, Earwigs, Fleas, Sod Webworms and Grubs.

RATE: Turf and around Industrial Plant Sites - 2 qts. per acre. Ornamental Plants - 1 pint to 2 quarts per 100 gallons.

APPLICATION: Apply as a thorough cover spray. On turf use 3 - 6 gallons of water per 1,000 sq. ft.

PACKED: 4 x Gal. - #31124,
2 x 2.5 Gal. - #31128

DURSBAN[®] 4- E INSECTICIDE RESTRICTED USE PESTICIDE

CONTAINS: 44.9% Chlorpyrifos

USE ON: Sod Farms, Golf Course (Turf only), Road Medians, Around Industrial Plant Sites and in Nurseries for Commercial Production only.

CONTROLS: Many insects such as Ants, Armyworms, Billbugs, Ticks, Crickets, Cutworms, Earwigs, Fleas, Sod Webworms and Grubs.

RATE: Turf and around Industrial Plant Sites - 1 qt. per acre. Ornamental Plants - 1/2 pint to 1 quarts per 100 gallons.

APPLICATION: Apply as a thorough cover spray. On turf use 3 - 6 gallons of water per 1,000 sq. ft.

PACKED: 2 x 2.5 Gal. - #31148

INSECTICIDAL SOAP

CONTAINS: 40% Potassium salts of fatty acids

USE ON: Vegetables, Herbs, Spices, Fruits, Nuts, Field Crops, Turf and Ornamentals. Also used to repel deer and rabbits.

CONTROLS: Soft bodied pest such as Aphids, Mites, Plant Bugs, Thrips, and Whitefly Scale. Also used as a fungicide for Powdery Mildew.

RATE: For most uses use a foliar sprays of 1.25 to 2.5 ozs per gal. of water.

APPLICATION: Apply as a full coverage foliar spray. See label for specific applications.

PACKED: 4 x Gal. - #40544, 2 x 2.5 gallon - #40548, 30 gal. - #40549

MALATHION 25% WETTABLE POWDER

CONTAINS: 25% Malathion on powder base.

USE ON: Many Vegetables and Fruits, Ornamentals, Citrus and Certain Animals.

CONTROLS: **Vegetables and Fruit:** Aphids, Scale, Worms, and Japanese Beetles.

Animals: Horn Flies, Lice, Ticks, Mites, and Sheep keds. **Ornamentals:** Scale, Aphids, Thrips, Spider Mites, Whiteflies, and Bagworms.

RATE: **Vegetables:** 5-7 lbs. per 100 gal. of water. **Animals:** 8-16 TBS. per gallon.

Ornamentals: 3-4 lbs. per 100 gallons.

APPLICATION: Apply as a full coverage foliar spray. See label for specific applications.

PACKED: 12 x 4 lb bag - #45764

MALATHION 50% E.C.

CONTAINS: 50% Malathion (4.4 lbs. per gal).

USE ON: Citrus, Ornamentals, Many Garden Vegetables, Many Fruit Trees, Rice, Strawberries, Outdoor areas

CONTROLS: Aphids, Scale, Worms, Japanese Beetle, Horn Flies, Lice, Ticks, Fleas, Bed Bugs, Thrip, Leafminers, Spider Mites and Mosquitoes (use at 4 1/2 ozs per gallon in outdoor areas).

RATE: Foliar Sprays 1 - 4 Tsp. per gallon water. See label.

APPLICATION: Foliar spray only.

PACKED: 4 x Gal. - #45774,
2 x 2.5 Gal. - #45778

MOLE CRICKET BAIT

with Carbaryl

CONTAINS: 5% Carbaryl Insecticide on an attractant feed base.

USE ON: Vegetables, Flowers, Fruits, Lawns, and Ornamentals.

CONTROLS: Cutworms, Armyworms, Crickets, Darkling Ground Beetles, Grasshoppers and Sowbugs.

RATE: 0.45 lb. to 0.9 lb. per 1,000 sq. ft.

APPLICATION: Apply evenly over area with fertilizer spreader.

PACKED: 40 lb. - #49519

MOLE CRICKET & CHINCH BUG LAWN INSECT CONTROL

CONTAINS: 0.1% Deltamethrin on granule dolomite base.

USE ON: Lawns, around House Foundations and Ornamental Plant Beds, Fire Ant Mounds.

CONTROLS: Ants, Armyworms, Chiggers, Chinch Bugs, Cockroaches, Crickets, Cutworms, Fire Ants, Spiders, Sod Webworms, Tick and Mole Crickets

RATE: Turf; 2 - 3 lbs. per 1,000 sq. ft. See label for specific instructions.

APPLICATION: Spread evenly with spreader, water in thoroughly for most insects.

PACKED: 40 lb. bag- #30949

SOLUBLE OIL SPRAY - SUPERIOR 70-SECOND TYPE

CONTAINS: 98% Oil (92% Unsulfonated Residue).

USE ON: Many Woody Ornamentals, Apples, Citrus, Avocados, and Mangos, Roses, and Ivy. Also may be used as a Plant Shine.

CONTROLS: Scales, White Fly Larvae, Mealy Bugs, and Spider Mites.

RATE: Non-dormant uses; 1 - 4 Tbs./gal (2 - 5 Qt. /100 gl.).

Dormant uses; 4 - 8 Tbsp./gal (6 - 12 Qt. / 100 gl.).

See label for specific uses.

APPLICATION: Mix with water and agitate frequently. Apply as a thorough cover spray.

PACKED: 2 x 2.5 Gal. - #52808, 55 Gal. drum - #52806

PAYBACK FIRE ANT BAIT

CONTAINS: 0.015% Spinosad (same active in Conserve)

USE ON: Lawns, Perimeter of Home and around Ornamental Plants (Flowers, Shrubs & Trees)

CONTROLS: Fire Ants.

RATE: 4 Tbs per mound or broadcast at 1/2 - 3/4 cup per 1,000 sq. ft. 12 oz treats up to 5,000 sq ft or 10 mounds.

APPLICATION: Sprinkle bait evenly over and around each mound in a 4 ft diameter circle. Do not disturb mounds. **OR** Broadcast with a hand held or ground driven rotary spreader.

PACKED: 9 lb bag - #54339

PERMETROL

LAWN INSECTICIDE GRANULES

CONTAINS: 0.5% Permethrin on an granular base.

USE ON: Lawns and around House Foundations

CONTROLS: Ants, Armyworms, Billbugs, Centipedes, Chinch Bugs, Cockroaches, Crickets, Cutworms, Fire Ants, Flea Beetles, Fleas, Grasshoppers, Lawn Moths, Leafhoppers, Scorpions, Silverfish, Spiders, Sod Webworms and Ticks

RATE: Lawns; 2 - 3 lbs. per 1,000 sq. ft. Fire Ant Mounds; 1 cup per mound

APPLICATION: Spread evenly with spreader and water in.

PACKED: 40 lb. - #55520 on corn cob carrier or #55529 on dolomite carrier

SNAIL AND SLUG BAIT

CONTAINS: 3.25% Metaldehyde on a pelletized feed base.

USE ON: Many Fruit Trees, Many Berry Crops, Many Vegetables, Ornamentals, Turfgrass lawns, Seed Grasses, Greenhouses

CONTROLS: Land Snails and Slugs.

RATE: 1 lb. per 1,100 to 1,500 sq. ft. or 30 - 40 lbs. per acre.

APPLICATION: Spread evenly over area.

PACKED: 40 lb. - #64459

THURICIDER[®] HPC

CONTAINS: Bacillus Thuringiensis liquid

USE ON: Many Vegetables, Citrus, Nuts, shrubs, trees, Tobacco, and flowering plants.

CONTROLS: Cabbage Looper, Orange Dog, Tobacco Hornworm, Imported Cabbageworm, Rindworm.

Controls only Worms and Caterpillars.

RATE: 2 - 4 Tsp. per gallon.

APPLICATION: Mix with water, add spreader-sticker, use as a thorough cover spray.

PACKED: 4 x Gal. - #69204

MISCELLANEOUS

PAINT POLYMER #100

CONTAINS: Acrylic Paint Polymer Compound

USE ON: Polyethylene Mulch

FOR: to give a temporary whitening of the mulch for up to 8 weeks.

RATE: For 100 gallons of spray mix:

-1 pt. of SURFACTANT FOR HERBICIDES

-1 oz. of SA DEFOAMER

-100 lbs. of Wilklay

-2 gallons of SA PAINT POLYMER #100

APPLICATION: This mixture will cover 3 to 6 rolls of Polyethylene mulch of 3 ft. x 2400 ft. long per 100 gallons.

PACKED: 5 gal.- #54205,

52 Gal. - #54206

NUTRITIONALS

12-0-0 6% FE, 2% MN

CONTAINS: 12% Nitrogen, 6% Iron, 2% Manganese

USE ON: Turfgrass and Ornamentals

RATE: Lawn and Fairways-1 to 3 Gal. per acre. Greens and Tees- 2 qts. to 2.5 gallons per acre. Bentgrass- 2 to 5 qts. per acre. Flowers- 1 to 2 pints per 100 gallons. Woody Ornamentals- 1 to 2 qts. per 100 gallons. Trees- 1 to 4 qts. per 100 gallons.

APPLICATION: For ornamentals, spray to the point of run off. May damage open blooms at high rates. For Turfgrasses apply in irrigation or spray using 3- 5 gallons per 1000 sq. ft.

PACKED: 2 x 2.5 Gal. - #76988

CHELATED CITRUS NUTRITIONAL SPRAY

CONTAINS: Iron 1.2%, Zinc 1.7%, Manganese 1.2% and Magnesium 1.0%, and Sulfur 4.1%.

USE ON: Citrus, Avocados and Mangoes.

CONTROLS: Most common minor element deficiencies, and to aid in the reduction of pH of spray water, which increases the stability of many pesticides.

RATE: 1 - 2 Tbs./gal. of spray. 3 - 6 Qts. per 500 gallons).

APPLICATION: In December, January, February for normal preventative spray.

Apply as a thorough cover spray to run off.

PACKED: 2 x 2.5 Gal. - #23408

CH. GENERAL PURPOSE MINOR ELEMENT SPRAY

CONTAINS: Iron 2.75%, Manganese 1.00%, Zinc 0.50%, Magnesium 0.50%, Copper 0.25% and Sulfur 3.8%.

USE ON: Flowers, Shrubs, Trees, Vegetables and Lawns.

TO CONTROL: Minor Element Deficiencies, yellowing of foliage, and to aid in the reduction of pH of spray water, which increases the stability of many pesticides.

NOTE: Deficiency symptoms are normally an indication of improper soil pH. Check and correct if necessary.

RATE: Foliar: 1 Tbs./gal.

(3 pts. per 100 gallons)

Drench: 10 fl. oz./ 10-15 gallons of water per 1000 sq. ft.

Lawns: 1 pt. per 1,000 sq. ft.

Vegetables: 1-2 quarts per acre.

Trees: 2-4 quarts per 500 gallons,

Ornamentals: 1-2 pints per 100 gallons

APPLICATION: Mix with water.

Apply as a drenching spray.

PACKED: 2 x 2.5 Gal. - #23418,

55 gal. drums - #23416

CHELATED LIQUID IRON

CONTAINS: Iron 5%.

USE ON: Flowers, Shrubs, Trees, Vegetables and Lawns.

TO CONTROL: Iron deficiency (Yellowing of foliage), and to aid in the reduction of pH of spray water, which increases the stability of many pesticides.

RATE: Foliar: 1 Tbs. per gallon
Soil Drench: 1 fl. oz. per 100 sq. ft.
Lawns: 1 pt. per 1000 sq. ft.

Vegetables: 1-2 quarts per acre.
Trees: 2-4 quarts per 500 gallons.
Ornamentals: 1-2 pints per 100 gallons

APPLICATION: Mix with water.

Apply as a drenching spray.

PACKED: 2 x 2.5 Gal. - #23428,
55 gal. - #23426

CHELATED 5% MANGANESE

CONTAINS: Manganese 5%.

USE ON: Vegetables and Field crops, Citrus, Apples, other Tree crops, and Ornamentals

TO CONTROL: For correction and prevention of Manganese deficiencies and to aid in the reduction of pH of spray water, which increases the stability of many pesticides.

RATE: Vegetables: 1-2 quarts per acre.

Trees: 2-4 quarts per 500 gallons.
Ornamentals: 1-2 pints per 100 gallons.

APPLICATION: Mix with water.

Apply as a thorough cover spray.

PACKED: 2 x 2.5 Gal. - #23468

CHELATED PALM NUTRITIONAL

CONTAINS: 2.50% Manganese, 1.50% Magnesium and 1.0% Iron.

USE ON: Palms, and other Ornamentals.

CONTROLS: Nutritional deficiencies in Palms and other ornamentals, and to aid in the reduction of pH of spray water, which increases the stability of many pesticides.

RATE: Palms: 1 - 2 tablespoons per gallon (1.5-3 qt. per 100 gl.) for preventative, 1 - 2 ounces per gallon (3-6 qt. per 100 gl.) for curative. Ornamentals: see label.

APPLICATION: Apply as a thorough cover spray to run off, also try to spray directly in the heart.

PACKED: 2 x 2.5 Gal. - #23398

TURF GREEN 5-0-0 (CHELATED)

CONTAINS: Nitrogen 5.0%, Iron 3.0%, Manganese 1.0%, Zinc 0.5%, Copper 0.25%, and Combined Sulfur 3.25%.

USE ON: Lawns, Turf, Greens, Shrubs, Ornamentals.

TO CONTROL: To control and prevent Minor Element problems and to supply Nitrogen to the plants.

RATE: 1-2 Quarts per acre, 2-3 Quarts per acre, and 2-3 Pints per acre

APPLICATION: Mix with water.

Apply as a thorough cover spray.

PACKED: 2 x 2.5 Gal. - #72858

CHELATED 5% ZINC

CONTAINS: Zinc 5%.

USE ON: CITRUS, Apples, other Tree crops, Vegetables and Field crops, and Ornamentals

FOR: correction and prevention of Zinc deficiencies and to aid in the reduction of pH of spray water, which increases the stability of many pesticides.

RATE: Vegetables: 1-2 quarts per acre.

Trees: 2-4 quarts per 500 gallons.

Ornamentals: 1-2 pints per 100 gallons.

APPLICATION: Mix with water. Apply as a thorough cover spray.

PACKED: 2 x 2.5 Gallon - #23488

ESSENTIAL MINOR ELEMENTS

CONTAINS: Magnesium 8.5%, Manganese 2.5%, Iron 4.0%, Copper 0.25%, Sulfur 8.0%, Zinc 1.0%, Boron .025%, Molybdenum .002%.

USE ON: Shrubs, Trees, Lawns, Turf, Flower and Vegetable Gardens.

FOR: The correction or prevention of many minor element deficiencies.

RATE: Gardens: Preventative: 1/4 - 1/2 cup per 10 sq. ft. or 1 1/4 - 2 1/2 lbs. (2 1/2 - 5 cups) per 100 sq. ft. Curative: 1 cup per 10 sq. ft. or 5 lbs. (10 cups) per 100 sq.ft.

Turf: 1 lb. (2 cups) per 100 sq. ft. or 10 lbs. per 1,000 sq. ft.

APPLICATION: Apply dry, broadcasting over treatment area. Water in thoroughly.

PACKED: 40 lb. - #34409

HI IRON PLUS

CONTAINS: 16% Iron, Manganese 3%, Zinc 2%, Copper 0.5%, Boron 0.1% and Combined Sulfur 15% in easy to spread granular form.

USE ON: Turf grass, Shrubs and Trees.

FOR: Correction and Prevention of Iron and certain other minor element deficiencies.

RATE: Lawns 2- 3 lbs. per 1,000 sq. ft.
Shrubs 1/4 - 1/2 cup per 100 sq. ft. Incorporation 1.5 - 2 pounds per cubic yard of media.

APPLICATION: Potting Mix; incorporate thoroughly. Plant Beds; mix with soil 1 - 6 inches deep. Lawns; spread uniformly and water in thoroughly.

PACKED: 25 lb. - #40577

MINOR ELEMENT SOLUBLE

CONTAINS: 8.15% Manganese, 3.2% Copper, 4.5% Zinc, 7.5% Iron, 15.0% Combined Sulfur, 1.45% Boron, and .046% Molybdenum. **The same as STEM®.**

USE ON: Ornamentals, Turf, Vegetables

FOR: Correction and prevention of Minor Element deficiencies.

RATE: Foliar Spray 1/2 to 2 lbs. per 100 gallons, or Drench and Constant feed at 1/2 lb. per 100 gallons

APPLICATION: Full volume Spray or with injection ratio feeders.

PACKED: 25 lb. - #49267

SOLUBLE FOLIAR BORON SPRAY

CONTAINS: 20.5% Elemental Boron (66% B₂O₃) - Solubor.

USE ON: Apples, Cabbage, Broccoli, Cauliflower, Gladiolus, Carnations, Poinsettias, Tomatoes, and Citrus.

FOR: Correction and prevention of Boron deficiencies.

RATE: Vegetables: 1/2 - 1 lb. per 100 gallons, Citrus: 1 lb. per 500 gallons.

APPLICATION: Obtain thorough plant coverage with out run off.

PACKED: 12 x 2 lb. - #64702

SODIUM MOLYBDATE

CONTAINS: 39.0% Molybdenum (59% MoO₃)

USE ON: Citrus, Tomatoes and other crops

FOR: Correction and prevention of Molybdenum deficiencies.

RATE: 1 -2 oz. per 100 gallons.

APPLICATION: Full volume spray.

PACKED: 12 x 4 oz. - #64490,
6 x 1 lb. - #64491

SOIL ACIDIFIER

CONTAINS: 90% pellet, dust-free sulfur

USE ON: Lawns and Turf, Shrubs, Trees and before planting Vegetables and Flowers.

FOR: The correction of high pH of soils.

RATE: Use 10 to 15 lbs. per 1,000 sq. ft. (1 to 1 1/2 lbs. per 100 sq. ft.) to reduce pH one unit.

Do not overdose - have pH checked before making a second application.

APPLICATION: Spread evenly over area and water in thoroughly.

PACKED: 40 lb. - #64580

PLANT GROWTH REGULATOR

FLOREL

Plant Growth Regulator

CONTAINS: 3.9% Ethephon

1. Flower induction in many Bromeliads.
2. Hybrid seed production of squash, cucumber, and pumpkin by changing sex expression.
3. Defoliation roses, of apples (in Washington), and tall hedge for early transplant.
4. Increase lateral branching of certain ornamentals (Azalea, Garden Chrysanthemum, Fuchsia, Zonal Geranium, Ivy Geranium, Lantana, Verbena, Vinca major).

RATE: 16 oz per 10 gallons for most ornamental uses. Check label for crop and use.

APPLICATION: apply as a foliar spray.

PACKED: 12 x Qt. - #36003,
4 x 1 Gal. - #36004

SOLUBLE FERTILIZERS

SA SOLUBLE TURF SPECIAL

30-7-14

TOTAL NITROGEN (N)	30.00%
4.30% Nitrate Nitrogen (N)	
1.30% Ammoniacal Nitrogen (N)	
24.4% Urea Nitrogen (N)	
AVAILABLE PHOSPHATE (P ₂ O ₅)	7.00%
SOLUBLE POTASH (K ₂ O)	14.00%
Boron (B)	0.02%
0.02% Soluble Boron as (B)	
Copper (Cu)	0.05%
0.05% Chelated Copper as (Cu)	
Chlorine (Cl) - not more than	1.00%
Iron (Fe)	0.20%
.20% Chelated Iron as (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese as (Mn)	
Molybdenum (Mo)	0.0005%
0.0005% Molybdenum as (Mo)	
Zinc (Zn)	0.05%
0.05% Chelated Zinc as (Zn)	

USE ON: Lawns, Golf Courses and Turf areas or any other area.

FOR: To supply all fertilizer necessary to grow healthy grass or as a supplement to dry fertilizer for quick greening and growth.

RATE: Turf: 1 to 3 lbs. in 10 to 20 gallons of water per 1,000 sq. ft.

Ornamentals: 2 lbs. per 100 gallons (1 tablespoonful per gallon).

Constant Feeding: 50-200 ppm (See label for chart)

APPLICATION: Apply every 1 to 2 months on rate and desired growth and color.

PACKED: 25 poly bag - #64877

SA SOLUBLE POTASH SPECIAL 20-5-30

TOTAL NITROGEN (N)	20.0%
9.1% Nitrate Nitrogen	
0.9% Ammoniacal Nitrogen	
10.0% Urea Nitrogen	
AVAILABLE PHOSPHORIC ACID (P ₂ O ₅)	5.0%
SOLUBLE POTASH (K ₂ O)	30.0%
Chlorine not more than	1.0%
Boron (B)	0.02%
Chlorine (Cl) - not more than	1.00%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.05%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn).	

PLANT NUTRIENTS DERIVED FROM: Potassium Nitrate, Ammonium Phosphates, and Urea. Ferric Sodium EDTA, Zinc Sodium EDTA, Manganous Sodium EDTA, Cupric Disodium EDTA, Sodium Borate, Sodium Molybdate. EDTA - Ethylenediaminetetraacetate ARTIFICIALLY COLORED

PACKED: 25 lb. poly bag - #64857

20-20-20

SOLUBLE FERTILIZER

TOTAL NITROGEN (N)	20.00%
5.98% Nitrate Nitrogen	
6.00% Ammoniacal Nitrogen	
8.02% Urea Nitrogen	
AVAILABLE PHOSPHATE (P ₂ O ₅)	20.00%
SOLUBLE POTASH (K ₂ O)	20.00%
Boron (B)	0.02%
Chlorine (Cl) - not more than	1.00%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.0005%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn).	

PLANT NUTRIENTS DERIVED FROM:

Potassium Nitrate, Monoammonium Phosphate, Diammonium Phosphate, Urea. Ferric Sodium EDTA, Zinc Disodium EDTA, Manganous Disodium EDTA, Cupric Disodium EDTA, Sodium Borate, Sodium Molybdate. EDTA - Ethylenediaminetetraacetate. ARTIFICIALLY COLORED

RATE: Spray: 5 lbs. per 100 gallons.

Drench: 2 lbs. per 100 gallons.

Constant feed: 50-200 ppm.(See label for chart)

Turf: 1 lb. in 10 gallons per 1,000 sq. ft.
APPLICATION: Spray: thoroughly every 7 - 10 days. Drench: 100 gallons per 400 sq. ft. .

PACKED: 10 x 5 lb. poly bag - #11305, 25 lb. poly bag low dye - #64727, 25 lb. poly bag extra dye - #64737

SA SOLUBLE ACID SPECIAL 21-7-7

TOTAL NITROGEN (N)	21.00%
2.10% Nitrate Nitrogen	
13.90% Ammoniacal Nitrogen	
5.00% Urea Nitrogen	
AVAILABLE PHOSPHATE (P ₂ O ₅)	7.00%
SOLUBLE POTASH (K ₂ O)	7.00%
Chlorine - not more than	1.00%
Potential Acidity 1510 lbs. Calcium Carbonate Equivalent Per Ton.	
Boron (B)	0.02%
Chlorine (Cl) - not more than	0.02%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.0005%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn)	

PLANT NUTRIENTS DERIVED FROM:

Potassium Nitrate, Ammonium Phosphates, Urea, Ammonium Sulfate. Ferric Sodium EDTA, Zinc Sodium EDTA, Manganous Sodium EDTA, Cupric Disodium EDTA, Magnesium Sulfate, Sodium Borate, Sodium Molybdate. EDTA - Ethylenediaminetetraacetate ARTIFICIALLY COLORED

PACKED: 25 lb. poly bag - #64897

SA SOLUBLE NITRATE

SPECIAL 20-10-20

TOTAL NITROGEN (N)	20.0%
12.06% Nitrate Nitrogen (N)	
7.94% Ammoniacal Nitrogen (N)	
AVAILABLE PHOSPHORIC ACID (P ₂ O ₅)	10.0%
SOLUBLE POTASH (K ₂ O)	20.0%
Boron (B)	0.02%
Chlorine (Cl) - not more than	1.00%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.0005%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn)	

PLANT NUTRIENTS DERIVED FROM: Potassium Nitrate, Ammonium Nitrate, and Ammonium Phosphates. Ferric Sodium EDTA, Zinc Sodium EDTA, Manganous Sodium EDTA, Cupric Disodium EDTA, Sodium Borate, Sodium Molybdate. EDTA-Ethylenediaminetetraacetate ARTIFICIALLY COLORED

PACKED: 25 lb. poly bag - #64847

SA SOLUBLE 16-3-16

High Nitrate Soluble Fertilizer Contains 4% Calcium and 2% Magnesium

TOTAL NITROGEN (N)	16.00%
13.20% Nitrate Nitrogen	
0.80% Ammoniacal Nitrogen	
AVAILABLE PHOSPHATE (P ₂ O ₅)	3.00%
SOLUBLE POTASH (K ₂ O)	16.00%
Boron (B)	0.02%
Calcium as Ca	4.00%
Chlorine (Cl) - not more than	1.00%
Copper (Cu)	0.015%
0.015% Chelated Copper (Cu)	
Iron (Fe)	0.125%
0.125% Chelated Iron (Fe)	
Magnesium as Mg	2.00%
2.00% Water Soluble	
Manganese (Mn)	0.04%
0.04% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.008%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn).	

PLANT NUTRIENTS DERIVED FROM:

Potassium Nitrate, Ammonium Nitrate, Potassium Phosphate, Calcium Nitrate, Magnesium Nitrate, Ferric Sodium EDTA, Zinc Disodium EDTA, Manganous Disodium EDTA, Cupric Disodium EDTA, Sodium Borate, Sodium Molybdate. EDTA - Ethylenediaminetetraacetate. ARTIFICIALLY COLORED

PACKED: 25 lb. poly bag - #64810

**SA SOLUBLE 15-0-15
with 11% Calcium**

TOTAL NITROGEN (N)	15.00%
14.00% Nitrate Nitrogen	
1.00% Ammoniacal Nitrogen	
AVAILABLE PHOSPHATE (P ₂ O ₅)	0.00%
AVAILABLE POTASH (K ₂ O)	15.00%
Boron (B)	0.02%
Calcium (Ca)	11.00%
Chlorine (Cl) - not more than	1.00%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.015%
Zinc (Zn)	0.05%
0.003% Chelated Zinc (Zn)	

PLANT NUTRIENTS DERIVED FROM: Calcium Nitrate, Potassium Nitrate, Ammonium Nitrate, Ferric Sodium EDTA, Zinc Disodium EDTA, Manganous Disodium EDTA, Cupric Disodium EDTA, Sodium Borate, Sodium Molybdate. EDTA - Ethylenediaminetetraacetate. ARTIFICIALLY COLORED
Potential Basicity: 340 lb. Calcium Carbonate equivalent per ton.

RATE: See label for constant feeding chart.
PACKED: 25 lb. bag - #64927

**PLANT STARTER
SOLUBLE FERTILIZER 12-48-8**

TOTAL NITROGEN (N)	12.0%
2.30% Nitrate Nitrogen	
9.10% Ammoniacal Nitrogen	
0.60% Urea Nitrogen	
AVAILABLE PHOSPHATE (P ₂ O ₅)	48.0%
SOLUBLE POTASH (K ₂ O)	8.0%
Boron (B)	0.02%
Chlorine (Cl) - not more than	1.00%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.0005%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn)	

PLANT NUTRIENTS DERIVED FROM: Ammonium Phosphates, Potassium Nitrate, Urea. Ferric Sodium EDTA, Manganous Disodium EDTA, Zinc Disodium EDTA, Cupric Disodium EDTA, Sodium Borate, Sodium Molybdate. Artificially colored

USE ON: Transplanted Tobacco, most Vegetables, Ornamentals, or any crop where high phosphate is desired.
RATE: Transplant solution and drench; 3 lbs. per 50 gallons (2 Tbs. per gallon). Spray; 5 lbs. per 100 gallons (1 1/2 Tbs. per gallon)
APPLICATION: Transplant solution use 1/2 to 1 pint per plant or 1 pint per 4 ft. of row.

PACKED: 16x3 lb. bag - #09803,
25 lb. bag - #64807

**SA SOLUBLE BLOOM
BOOSTER SPECIAL 10-30-20**

TOTAL NITROGEN (N)	10.0%
5.10% Nitrate Nitrogen	
4.90% Ammoniacal Nitrogen	
AVAILABLE PHOSPHORIC ACID (P ₂ O ₅) ..	30.0%
SOLUBLE POTASH (K ₂ O)	20.0%
Boron (B)	0.02%
Chlorine (Cl) - not more than	1.00%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo)	0.0005%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn)	

PLANT NUTRIENTS DERIVED FROM: Mono Ammonium Phosphate, Potassium Nitrate, Mono Potassium Phosphate, Ferric Sodium EDTA, Manganous Disodium EDTA, Zinc Disodium EDTA, Cupric Disodium EDTA, Sodium Borate, Sodium Molybdate. EDTA - Ethylenediaminetetraacetate. Artificially colored

PACKED: 25 lb. poly bag - #64797

**SA SOLUBLE HYDROPONIC
SPECIAL 5-11-26**

TOTAL NITROGEN (N)	5.0%
5.00% Nitrate Nitrogen	
AVAILABLE PHOSPHORIC ACID (P ₂ O ₅) ..	11.0%
SOLUBLE POTASH (K ₂ O)	26.0%
Boron as (B)	0.05%
Chlorine (CL) - not more than	1.0%
Copper (Cu)	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe)	0.10%
0.10% Chelated Iron (Fe)	
Water Soluble Magnesium (Mg)	3.20%
Manganese (Mn)	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum as Mo	0.01%
Zinc (Zn)	0.05%
0.05% Chelated Zinc (Zn)	

PLANT NUTRIENTS DERIVED FROM: Potassium Phosphate, Potassium Nitrate, Ferric Sodium EDTA, Manganous Disodium EDTA, Zinc Disodium EDTA, Copper Sulfate, Magnesium Sulfate, Sodium Borate, Sodium Molybdate. EDTA - Ethylenediaminetetraacetate. Artificially colored

PACKED: 25 lb. poly bag - #64777

SOIL WETTING AGENTS

SOIL WETTING AGENT L

CONTAINS: 99.8% specially blended non-ionic surfactants

USE ON: Lawns, Landscape installations and Bedding plants.

FOR: Ensuring uniform distribution and availability of moisture in the root zone, Reducing evaporative water loss, and Aiding in water penetration.

RATE: 8-16 oz. per 1,000 sq. ft. See label for specific uses.

APPLICATION: Cover spray using at least 5 gl. of water per 1,000 sq. ft. Water after application.

PACKED: 4 x Gal. - #64594 and
2 x 2.5 Gal. - #64598

**SOIL WETTING AGENT SG
(SPREADABLE GRANULES)**

CONTAINS: 15% by weight specially blended non-ionic surfactants on an organic base.

USE ON: Lawns, and Landscape planting

FOR: Ensuring uniform distribution and availability of moisture in the root zone, Reducing evaporative water loss, and aiding in water penetration.

RATE: 3 1/2 lb. for 1,000 sq. ft.

APPLICATION: Broadcast with a spreader or spot treat.

PACKED: 40 lb. - #64609

**SOIL WETTING AGENT
INJECTABLE**

CONTAINS: 33.0% specially blended non-ionic surfactants

USE ON: Lawns, Landscape installations and Bedding plants.

FOR: Ensuring uniform distribution and availability of moisture in the root zone, Reducing evaporative water loss, and Aiding in water penetration.

RATE: 2 Quarts per acre.

APPLICATION: Injection pump
PACKED: 55 gal. - #64616

**OTHER STOCK BLENDS ARE AVAILABLE SUCH AS
13-2-13, 9-15-30, 8-15-36, 16-16-16 AND 20-2-20.
CUSTOM BLENDED ANALYSIS ARE AVAILABLE IN
TON LOTS BY REQUEST.**

