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Penetrator™ (Ionic Surfactant)	

## History of Baicor®

**BAICOR®, L.C.** based in beautiful Logan, Utah, was founded in **1989 by Dr. Gene W. Miller** who has spent his adult life in researching, developing, and teaching plant nutrition at Utah State University. Since 1989, he has applied his knowledge to the preparation of quality and effective specialized fertilizers for agriculture, golf, and home and garden markets.

BAICOR® is a manufacturer of fertilizers specializing in liquids for foliar and soil applications. BAICOR® has a well-equipped research laboratory keeping up with tomorrow's innovations. Blends of nutrients required by specific plants have been developed after years of research and testing. This has resulted in the present line of Baicor's® products, which will always reflect the most advanced stages of fertilizers for the health, vigor, color and increased yield of plants.

BAICOR® prides itself on research to maintain a position at the forefront of plant nutrition. Well-equipped laboratories in plant nutrition, agronomy, plant physiology, and microbiology are staffed full time by world-renowned scientists:

#### • Dr. Olga Vedina

Plant physiology, agronomy, and biology

#### • Brian Haschemeyer (Brandt)

Director of Discovery and Innovation

The efficiency of present products and new developments are tested in a large modern greenhouse and field plots.

Now, BAICOR® brings these exceptional products to you. The line of BAICOR® plant nutrients is 100% environmentally friendly and organic based. Each is specifically formulated to provide the optimum level of nutrients that plants need.

BAICOR® offers products which include all essential nutrients required for plant growth and development. OMRI approved products for agriculture are available for the organic grower.

BAICOR'S® products are chelated and complexed from organic and amino acids found naturally in plants and in the soil. These are true chelates with a ring structure and a high stability constant (they generally do not fall out or precipitate when mixed with phosphate or one another).

Our products are made with the finest natural materials and blended scientifically together to assure quality and effectiveness. Continuous research and development will keep BAICOR® on the cutting edge of plant nutrition.

### **Measurement Conversions**

	LIQUID MEASUREI	MENT CONVERSION	
1 teaspoon		1/3 Tablespoon	5 ml
1 Tablespoon	1/2 fluid ounce	3 teaspoons	15 ml, 15 cc
2 Tablespoons	1 fluid ounce	1/8 cup, 6 teaspoons	30 ml, 30 cc
1/4 Cup	2 fluid ounces	4 Tablespoons	59 ml
1/3 cup	2 2/3 fluid ounces	5 Tablespoons + 1 teaspoon	79 ml
1/2 Cup	4 fluid ounces	8 Tablespoons	118 ml
2/3 Cup	5 1/3 fluid ounces	10 Tablespoons + 2 teaspoons	158 ml
3/4 Cup	6 fluid ounces	12 Tablespoons	177 ml
7/8 Cup	7 fluid ounces	14 Tablespoons	207 ml
1 Cup	8 fluid ounces / 1/2 Pint	16 Tablespoons	237 ml
2 Cups	16 fluid ounces / 1 Pint	32 Tablespoons	473 ml
4 Cups	32 fluid ounces	1 Quart	946 ml
1 Pint	16 fluid ounces / 1 Pint	32 Tablespoons	473 ml
2 Pints	32 fluid ounces	1 Quart	946 ml, 0.946 Liters
8 Pints	1 Gallon / 128 fluid ounces		3785 ml, 3.78 Liters
4 Quarts	1 Gallon / 128 fluid ounces		3785 ml, 3.78 Liters
1 Liter	1.057 Quarts		1000 ml
AREA MEASUREMENT CONVERSION			
1 Sq. Yard	9 Sq. Feet	0.92 Sq. Meters (M)	
1 Acre	160 Sq. Rods	4,840 Sq. Yards	43,560 Sq. Feet
	1 Sq. Rod	30.25 Sq. Yards	272.25 Sq. Feet
1 hectare (ha)	100 ares (a)	10,000 Sq. Meters (M)	2.47 Acres

### Nature of Baicor® Products

**BAICOR®** products are chelated and complexed from organic and amino acids found naturally in plants and in the soil. These are true chelates with a ring structure and a high stability constant (they generally do not fall out or precipitate when mixed with phosphate or one another). This is not true of many other products which do not remain in solution when mixed together and/or with phosphate, thus tying up the nutrients that are needed in the first place.

**BAICOR®** Chelates and/or Complexes contain "facilitators" which aid in penetration into plant cells, effective translocation to sites of action and provide all or most of the nutrients needed by plants. All **BAICOR®** products are non-phytotoxic when used as directed. **BAICOR®** products contain an organic base consisting of organic compounds which function metabolically and are found naturally in the plant.



## Nutra Green® 5-10-5 + Chelated Micronutrients

#### Benefits of Nutra Green®

Nutra Green® is a unique and True All Purpose fertilizer. Many other products use the term "All Purpose" but often mislead consumers. Nutra Green® contains the essential nutrients needed by the plant in a completely balanced, organic-based formula, ideal for optimal plant development. It is used all around the world in Agriculture and is excellent for all horticultural plants as well as vegetable gardens. Nutra Green® contains high balanced concentrations of micro-nutrients compared to other all purpose fertilizers.

- Excellent Greening and Color Of Plants: Nutra Green® has been found to be one of the strongest and most effective organic-based foliar products on the market today. Major resorts, agriculture, agronomists and horticulturists rely on its effectiveness. Green-up without rapid growth: Nutra Green® contains a unique proprietary combination of plant-based amino acids, organic acids and carbohydrates. Quick visual response: The chelated and complexed nutrients contained in Nutra Green® are rapidly absorbed into plant tissue to provide a rapid and sustained green-up.
- Nutra Green® also contains secondary nutrients (magnesium and sulfur) and a full range of micronutrients (iron, zinc, manganese, copper and boron) which are 100% chelated to alleviate most deficiencies.
- Iron, zinc and manganese deficiencies are very common in calcareous or high pH soils. In result the plant may yellow due to a lack of iron, zinc, or manganese. Nitrogen will not correct the problem; only proper nutrition will restore the natural green color and vigor of plants.
- Helps with Plant Stress Tolerance: Nutra Green® provides the plants with high levels of phosphorus and potassium, which increases plant's tolerance to many stress conditions. There are also some indications by researchers that phosphorus and potassium play a key role in reducing disease infections.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )10.0%	
Soluble Potash (K <sub>2</sub> O)5.0%	
Magnesium (Mg)1.0%	
1.0% water soluble magnesium (Mg)	
Boron (B)0.1%	
0.1% water soluble boron (B)	
Copper (Cu)0.1%	
0.1% water soluble copper (Cu)	
Iron (Fe)1.0%	
1.0% water soluble iron (Fe)	
Manganese (Mn)0.5%	
0.5% water soluble manganese (Mn)	
Zinc (Zn)0.1%	
0.1% water soluble zinc (Zn)	

#### Also available in 10-9-5 + Micros.

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### **AERIAL APPLICATIONS:**

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 4 quarts per acre.

NOTE: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre

GRAIN CROPS: Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer.
Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration ... 2 qts/acre
Beginning Deficiency ... 3 qts/acre
Severe Deficiency ... 4 qts/acre

1 U.S. Gallon · Net Weight 11.4 lbs. 3.78 Liters · 5.17 Kg.

## **2-9-5**+ Micronutrients

**2-9-5** is a complete low nitrogen nutrient package that is a balanced and truly chelated fertilizer for effective nutrient uptake.

2-9-5 is specially formulated to be used as a starter or in banding for soil applications. It is also an effective foliar fertilizer during the crop growing season. It can also be applied with drip line irrigation systems and fertigation/injector, pivot and line systems.

#### Benefits of 2-9-5

- Highly efficient 2-9-5 contains high levels of readily available phosphorus for plant's cells and is rapidly absorbed by the plant. Phosphorus is a key ingredient in the photosynthetic process needed for growth and development. Phosphorus is required for energy processes in the cells of plants.
- Contains a unique proprietary combination of plant-based amino acids, organic acids and complex carbohydrates, which are found naturally in plants and soil. These are also used as a food source by both plants and micro-organisms for energy.
- Contains secondary nutrient (Magnesium) and a full range of micro-nutrients (Iron, Zinc, Manganese, Copper and Boron) which are 100% chelated to alleviate most deficiencies. For example, the Iron Chelate in 2-9-5 is many times more effective than non-chelated products.
- Compatible with most fertilizers, herbicides and pesticides available on the market today, however a jar test is recommended.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	2.0%
Available Phosphate (P2O5)	9.0%
Soluble Potash (K <sub>2</sub> O)	5.0%
Magnesium (Mg)	
0.5% water soluble magnesium (Mg)	
Boron (B)	0.05%
0.05% water soluble boron (B)	
Copper (Cu)	0.05%
0.05% water soluble copper (Cu)	
Iron (Fe)	0.5%
0.5% water soluble iron (Fe)	
Manganese (Mn)	0.4%
0.4% water soluble manganese (Mn)	
Zinc (Zn)	0.6%
0.6% water soluble zinc (Zn)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 4 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre.

GRAIN CROPS: Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration		
Beginning Deficiency	. 3	qts/acre
Severe Deficiency	. 4	qts/acre



**PK 2-6-12** is a low nitrogen, high potassium and phosphorus fertilizer containing selected micronutrients including molybdenum and cobalt. This product is designed for crops under stress or where limited vegetative growth is desirable.

It is advantageous to use PK 2-6-12 to increase blooming and fruit set or at later stages of plant growth, for root enhancement.



#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	2.0%
Available Phosphate (P2O5)	6.0%
Soluble Potash (K <sub>2</sub> O)	12.0%
Boron (B)	0.05%
0.05% water soluble boron (B)	
Cobalt (Co)	0.01%
0.01% water soluble cobalt (co)	
Copper (Cu)	0.05%
0.05% water soluble copper (Cu)	
Manganese (Mn)	0.05%
0.05% water soluble manganese (Mg)	
Molybdenum (Mo)	0.01%
0.01% water soluble molybdenum (Mo)	
Zinc (Zn)	0.05%
0.05% water soluble zinc (Zn)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### FOLIAR APPLICATIONS:

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

FRUIT, NUT & VINE CROPS: Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 quarts per acre. NOTE: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 2 quarts per acre.

GRAIN CROPS: Apply 1 - 2 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 2 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 2 quarts per acre with irrigation water.
Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	1 qt/acre
Beginning Deficiency	2 qts/acre
Severe Deficiency	3 qts/acre



## Excel Triple 5<sup>TM</sup> 5-15-5

**Excel Triple 5™** is a high phosphate product and contains calcium. This combination is unique to only a few products, where both calcium and phosphate remain in true solution. Baicor researchers have produced Excel Triple 5, which incorporates high amounts of calcium, phosphorus and also potassium.

Calcium is primarily taken up through the underdeveloped root tip in the soil. At times of peak demand, although there is adequate calcium in the soil, the plant may experience deficiency. This may result in blossom end rot in tomato, bitter pit in apple, internal brown spot in potato, etc. Foliar addition of calcium may assure adequate nutrients for growth and development.

Phosphorus is present in high amounts in the only plant usable phosphate form. The highest concentration of phosphorus within the plant is in the cell plasma; it is intimately involved in all energy-related reactions. Plants with adequate phosphorus are more resistant to all stress conditions including disease infections.

Potassium is required in large amounts by the plant. It is involved in over 40 enzymatic reactions, which are crucial in plant metabolism. The opening and closing of stomates, water relations and membrane integrity require the essential potassium nutrient.

Nitrogen is required in high amounts for critical structural and metabolic roles, i.e. synthesis of building- block amino acids and complex metabolites such as proteins, nucleic acids and porphyrins. Nitrogen is present in the most usable nitrate form for uptake and translocation.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	5.0%
Total Nitrogen (N)4.3% Nitrate Nitrogen	
0.7% Urea Nitrogen	
Available Phosphate (P2O5)	15.0%
Soluble Potash (K <sub>2</sub> O)	5.0%
Available Phosphate (P <sub>2</sub> O <sub>5</sub> ) Soluble Potash (K <sub>2</sub> O) Calcium (Ca)	5.0%
5.0% water soluble calcium (Ca)	

#### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AFRIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 100 parts of water before introducing product.

#### FRUIT. NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 - 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	2 qts/acre
Beginning Deficiency	3 qts/acre
Severe Deficiency	4 qts/acre



1 U.S. Gallon • Net Weight 11.8 lbs. 3.78 Liters • 5.35 Kg.

### Manganese Shotgun®

Manganese Shotgun® is a high concentration of manganese, zinc and iron. These micro nutrients are highly chelated with organic acids, amino acids and carbohydrates that are natural components of the plant. These components are easily recognized by the plant, bio-degradable, and supply energy to the plant and soil micro-organisms.

#### Benefits of Manganese Shotgun®

- Soils are often deficient in multiple trace nutrients;
   Manganese Shotgun contains high amounts of Manganese with Zinc and Iron.
- Natural components provide faster uptake, translocation and use of micronutrients.
- Manganese is essential for steps in the photosynthetic pathway.



#### **GUARANTEED ANALYSIS**

Iron (Fe)	2.0%
Iron (Fe)	
2.0% water soluble iron (Fe)  Manganese (Mn)  4.0% water soluble manganese (Mn)	4.0%
4.0% water soluble manganese (Mn)	
Zinc (Zn)	2.0%
2.0% water soluble zinc (Zn)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AFRIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

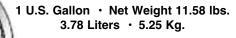
#### SPRINKLER IRRIGATION:

Apply 1 - 3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration 1	qt/acre
Beginning Deficiency 2	qts/acre
Severe Deficiency	qts/acre



### Zinc Shotgun®

**Zinc-Shotgun®** is a fertilizer that focuses on micronutrients to satisfy needs of customers seeking high zinc with manganese, iron and copper. The micronutrients are completely chelated with natural organic acids, amino acids, and carbohydrates that are readily bio-degradable and supply energy to the plant and soil microflora.

Many soils are low in zinc and also require other micronutrients for the growth of good crops.

#### Benefits of Zinc Shotgun®

- Complete, organically complexed micronutrient package containing essential elements to improve plant health and growth.
- Organically complexed with plant based amino acids, organic acids, and complexed polysaccharides.
- The nutrients are readily absorbed by the plant for a faster response.
- Designed to be applied both by foliar application and fertigation practices and is also effective when applied directly to the soil.



#### **GUARANTEED ANALYSIS**

Boron (B)	0.05%
Copper (Cu)	0.1%
0.1% water soluble copper (Cu)	
Iron (Fe)	2.0%
2.0% water soluble iron (Fe)	
Manganese (Mn)	2.0%
2.0% water soluble manganese (Mn)	
Zinc (Zn)	4.0%
4.0% water soluble zinc (Zn)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AFRIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### FOLIAR APPLICATIONS:

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT NUT & VINE CROPS.

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	
Beginning Deficiency	2 qts/acre
Severe Deficiency	3 gts/acre



1 U.S. Gallon • Net Weight 10.6 lbs. 3.78 Liters • 4.8 Kg.

## Iron Combo Chelate® 4.0% Fe

#### **Prevent & Correct Iron and Micronutrient Deficiencies**

**Iron Combo-Chelate®** is a broad spectrum micro-nutrient fertilizer containing natural, organic-based chelates of iron, zinc, manganese, copper, and boron. It can be applied to lawns, trees, shrubs, greenhouse plants, flowers and gardens. Any plant with Iron Chlorosis or micro-nutrient deficiencies can be effectively foliated with Iron Combo-Chelate®.

#### Benefits of Iron Combo-Chelate®

- A complete micro-nutrient fertilizer containing natural chelates of iron, zinc, manganese, copper, and boron.
- When applied to chlorotic plants, greening can be seen within a week and can be maintained with consecutive applications.
- The nutrients are quickly absorbed for a fast response.
- Designed to be foliar applied and foliar absorbed, however it can be added to fertigation solutions.
- 100% organically chelated, no synthetic chelates and 100% biodegradable.



#### **GUARANTEED ANALYSIS**

Soluble potash (K <sub>2</sub> O)	1.0%
Boron (B)	
0.18% water soluble boron (B)	
Copper (Cu)	0.2%
0.2% water soluble copper (Cu)	
Iron (Fe)	4.0%
4.0% water soluble iron (Fe)	
Manganese (Mn)	1.0%
1.0% water soluble manganese (Mn)	
Zinc (Zn)	0.80%
0.80% water soluble zinc (Zn)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 – 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 3 quarts per acre with irrigation water.
Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration 1	qts/acre
Beginning Deficiency 2	qts/acre
Severe Deficiency	ats/acre



## Plant Stimulator<sup>™</sup> "BUFFER"

**PLANT STIMULATOR™** is a bio-stimulant containing selected biological stimulants including natural plant metabolites, protein and enzyme precursors. It enhances utilization and translocation of nutrients in fertilizer blends & foliars.

PLANT STIMULATOR™ is also designed to buffer, chelate and complex nutrients to keep them in solution and in a form readily available for plant uptake, translocation and metabolic use. It is composed of natural derivatives from plant extracts including carbohydrates, and organic acids.

PLANT STIMULATOR™ contains natural components found in the plant itself and is readily biodegradable.

PLANT STIMULATOR™ is 4 products in one:

- Bio-Stimulant
- Water buffering agent
- Microbe food for soil microorganisms
- Foliar enhancer (makes nutrients more available)

#### Benefits of PLANT STIMULATOR™

- Improves nutrient uptake
- Food source for micro-flora in the soil
- Excellent water buffer (1 part to 4000 parts water)
- Enhances utilization and translocation of nutrients

#### **GUARANTEED ANALYSIS**

#### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration . . . 1 qts/acre
Beginning Deficiency . . . 2 qts/acre
Severe Deficiency . . . . 3 qts/acre





1 U.S. Gallon • Net Weight 9.7 lbs. 3.78 Liters • 4.4 Kg.



**UPTAKE®** is a unique and effective product that contains high amounts of phosphorus and potassium to enhance and stimulate plant and root development.

Plants with high levels of phosphorus have an increased tolerance to many stress conditions; phosphorus levels help plants to recover from injury more rapidly. There are also reports that phosphorus plays a key role in reducing disease infection.

Potassium stimulates over 40 enzymes within the plant that are responsible for plant growth and development.

#### **Benefits of UPTAKE®**

- Phosphorus is required by crops (nitrogen, potassium, calcium, magnesium, sulfur).
   Phosphorus is often the most neglected by growers, yet no element plays a more important role in the overall metabolic process of the plant.
- Phosphorus can be quickly absorbed by the tissue and is very effective when applied as a foliar.
- The highest distribution of phosphorus within the plant is in the cell plasma and it is a key ingredient in the many energy requiring reactions in the plant.
- Plants with high level of phosphorus have increased tolerance to many stress conditions. Good phosphorus levels also help crops recover from stress or injury more rapidly. There are also some indications by researchers that phosphorus plays a key role in reducing disease infections.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	3.0%
2.10% Ammoniacal Nitrogen	
0.9% Urea Nitrogen	
Available Phosphate (P2O5)*	4.0%
20.0% Total Phosphite	
Soluble Potash (K2O)	17.0%
Boron (B)	
0.02% water soluble bron (B)	
Cobalt (Co)	0.01%
0.1% water soluble cobalt (Co)	
Molybdenum (Mo)	0.001%
0.001% water soluble molybdenum (Mo)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### FOLIAR APPLICATIONS:

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 2 quarts per acre.

GRAIN CROPS: Apply 1 - 2 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 2 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 2 quarts per acre with irrigation water.
Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	1 qts/acre
Beginning Deficiency	2 qts/acre
Severe Deficiency	3 ats/acre



1 U.S. Gallon • Net Weight 11.4 lbs. 3.78 Liters • 5.17 Kg.

## Slam Dunk<sup>TM</sup> 0-21-28

Slam Dunk™ 0-21-28 Contains organic acids and amino acids. Usable ortho-phosphate form for maximum growth and development. The high ortho-phosphate is combined with highly concentrated potassium in the ionic form for maximum uptake, translocation and utilization. This is a combination of two of the essential nutrients required in highest amounts by the plant.

Phosphorus is essential for the myriad energy reactions required in plant metabolism as well as components in the nucleus important in cellular reproduction.

Potassium is necessary for plant-water relationships. This includes stomata regulation and transpiration, enzymatic reactions in glycolysis, Krebs cycle, and over 40 other metabolic reactions requiring potassium to function.

This product fits the grower's need where there is a demand for high concentrations of soluble, usable phosphorus and potassium.

#### **GUARANTEED ANALYSIS**

Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	21.0%
Soluble Potash (K2O)	28.0%

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### **AERIAL APPLICATIONS:**

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 2 quarts per acre.

GRAIN CROPS: Apply 1 - 2 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 2 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 2 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	. 1	l qt/acre
Beginning Deficiency	. 2	2 gts/acre
Severe Deficiency		



1 U.S. Gallon · Net Weight 13.1 lbs. 3.78 Liters · 5.94 Kg.

## Golden Grain® 7-5-5

**GOLDEN GRAIN®** is specifically formulated for grain crops. This fertilizer is balanced with phosphorus, potassium and nitrogen content containing high levels of trace nutrients, iron, zinc, and manganese. It contains proprietary activators to assist and help in translocation of nutrients essential for plant growth.

#### **Benefits of GOLDEN GRAIN®**

- GOLDEN GRAIN® is especially blended to supplement the nutrients generally required by grain crops for optimum growth.
- Grain crops often have a need for supplemental nitrogen, phosphorus and potassium. Especially in calcareous and high pH soils, iron and other micro-nutrients (zinc, manganese) are limiting. Iron is essential for chlorophyll formation and is required by the plant for many metabolic roles including nitrate reduction, nitrogen fixation and photosynthesis. A yellowing of grain may be a deficiency of nitrogen and iron. Potassium is essential for activity of many enzymes and aids in the uptake and transport of nutrients through cellular membranes. Adequate phosphorus is necessary for grain development and maturity.

The window of application has been found to be at the flag leaf stage (4-5 inches high). The grower at this time applies bronate or 2-4 D (herbicide) and the GOLDEN GRAIN® may be included at this time to save the grower cost of additional applications. A single foliar at this time has shown consistent increases from 10% to over 20% in yield. Additional foliars may increase these levels even higher.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	7.0%
1.35% Nitrate Nitrogen	
3.34% Urea Nitrogen	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	5.0%
Soluble Potash (K <sub>2</sub> O)	
Copper (Cu)	
Iron (Fe)	
0.5% water soluble iron (Fe)	
Manganese (Mn)	0.2%
0.2% water soluble manganese (Mn)	
Zinc (Zn)	0.2%
0.2% water soluble zinc (Zn)	

#### **Application Rates**

#### WINDOW OF APPLICATION PRIOR TO FLAG LEAF STAGE AT THE TIME HERBICIDE.

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 4 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre.

GRAIN CROPS: Apply 2 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	. 2 ats/acre
Beginning Deficiency	
Severe Deficiency	. 4 qts/acre



1 U.S. Gallon · Net Weight 10.2 lbs. 3.78 Liters · 4.63 Kg.

## Soil Stimulator® "Root & Soil Stimulator"

**SOIL STIMULATOR®** is "5 Products in one"

- Calcium Enriched
- Soil Conditioner, used as an aid to improve soil structure.
- Liquid Compost, which will stimulate micro-flora and make nutrients more available.
- Starter Fertilizer, fortified with nitrogen and calcium.
- Alleviates calcium deficiencies such as blossom end rot in tomatoes, bitter pit in apples etc.

SOIL STIMULATOR® is a Soil and Root Stimulator!!! It is used as an aid to improve soil texture, increase water penetration, increase cell wall structure, improve nutrient uptake, stimulate micro-flora and improve alkaline (high pH) and saline soils.

#### Benefits of SOIL STIMULATOR®

- Contains naturally occurring plant extracts and liquid fermentation products containing enzyme precursors, microbial metabolites, natural plant hormones, organic acids, carbohydrates, glycosides, and enzyme stimulants.
- Enhances microbial activity.
- Contains natural plant extracts that aid in penetration of water into the soil, resulting in greater oxidation and healthy microbial activity.
- A food source for micro-organisms fostering their growth in the soil. This enhances the release of nutrients from the soil in useful forms for plant growth and development.
- Contains readily available calcium for plant uptake. The nitrogen and calcium stimulate plant growth and calcium is available to replace sodium on the soil micelle (the soil component that absorbs nutrients). Together with increased oxidation and penetration it results in improved soil texture and improvement of alkaline and salinity conditions.
- Contains natural components such as saponin to aid in soil penetration.
- Helps reduce salts in the soil.

Essential for early root growth and new root growth.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	9.0%
3.0% Urea Nitrogen	
1.0% Ammoniacal Nitrogen	
5.0% Nitrate Nitrogen	
Calcium (Ca)	4.5%
4.5% water soluble calcium (Ca)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### FOLIAR APPLICATIONS:

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT. NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 2 - 4 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 2 - 4 quarts per acre.

GRAIN CROPS: Apply 2 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 2 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

> 1 U.S. Gallon · Net Weight 11.04 lbs. 3.78 Liters · 5 Kg.

## Micro-Feast® Micronutrients & Microbe Enhancer

**MICRO-FEAST®** is a unique product like no other! It is a fertilizer that fosters helpful micro-organism growth when used in the soil. It feeds and builds micro-flora to help make nutrients more available to the plant.

MICRO-FEAST® is specially formulated to stimulate microbial growth in the soil and enhance soil fertility. The Nitrogen, Phosphorus, Potassium, Iron, Manganese and Zinc are in proper chelated and complexed forms for better utilization for plant and root health.

#### Other Benefits of MICRO-FEAST®

- Contains plant metabolites, carbohydrates, and enzyme precursors that are combined with organic and amino acids together with essential mineral nutrients.
- Provides available nutrients for foliar absorption and a healthy soil rich in a balanced micro-flora.
- Provides a fully degradable energy source for use in the plant.
- Compatible with most fertilizers, herbicides and pesticides available on the market today, however a jar test is recommended.



#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	5.0%
3.5% Urea Nitrogen	
Available Phosphate (P2O5)	3.0%
Soluble Potash (K <sub>2</sub> O)	4.0%
Iron (Fe)	0.2%
0.2% water soluble iron (Fe)	
Manganese (Mn)	0.05%
0.05% water soluble manganese (Mn)	
Zinc (Zn)	0.05%
0.05% water soluble zinc (Zn)	

#### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

Add 20 - 100 parts water to product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 gallons per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 2 quarts - 1 gallon per acre.

GRAIN CROPS: Apply 2 quarts - 1 gallon per acre.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 2 gallons per acre with irrigation water.
Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	0.5 gal/acre
Beginning Deficiency	1 gal/acre
Severe Deficiency	1 - 1.5 gal/acre

1 U.S. Gallon · Net Weight 10.8 lbs. 3.78 Liters · 4.9 Kg.

### NBE®

**NBE®** is a unique product that was designed to accelerate growth and development of seedlings. When applied on the seed, growth of the root and shoot is increased significantly in the first 10 days. For germinating seeds, this accelerated growth establishes a larger root mass, provides a shoot that is able to penetrate the soil surface and have a larger leaf surface to initiate a higher photosynthetic rate. This often means the difference for a good or successful crop and could eliminate reseeding under poor soil conditions.

NBE® regulates the growth both at the germination stage and later growth stages. Foliar applications have been shown to increase crop yield. In addition to the accelerated growth response, treated seeds are more resistant to diseases. This is provided through the presence of natural substances that induce disease resistance to the seedling and plant. This early resistance may help eliminate early rot of the seed and diseases common in seedlings.

NBE® has been scientifically tested on many crops and plants including wheat, potatoes, sugar beet, corn and grasses. The increase in root mass helps increase nutrient uptake and may help improve drought resistance of the plant.

The seed needs to be wetted with NBE® before planting or in the seed bed; foliar application is also an effective way of enhancing plant growth.

NBE® may be diluted 50 to 100 times depending on application procedures. It may be sprayed directly on the seed in the hopper or mixed directly with or applied over the seed.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	1.0%
1.0% Urea Nitrogen	
Available Phosphate (P2O5)	1.0%
Soluble Potash (K <sub>2</sub> O)	1.0%

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### FOLIAR APPLICATIONS:

Use at least 50 parts water to 1 part BAICOR® Fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 gallon per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 gallon per acre.

GRAIN CROPS: Apply 1 gallon per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 2 gallons per acre in 50 gallons of water.

**HYDRO SEEDING:** 4 gallons per acre diluted 50 times with water.

#### TRANSPLANTING:

Mix 2fl oz of NBE® per gallon of water that is used for transplanting.

#### SPRINKLER IRRIGATION:

Apply 1 - 2 gallons per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 50 parts water to 1 part BAICOR® fertilizer. Apply directly to seeds unless it has been determined/tested by the consultant or grower before planting or in the seed bed.

SEED TREATMENT: 1-2 gallons/acre diluted 50 times with water





### Bio-Amino Nitrogen™

4-1-1

Bio-Amino Nitrogen™ contains high amounts of amino acids, organic acids and fulvic acid extract. The nitrogen is available from amino acids for immediate use. Seaweed provides bio stimulants that regulate plant growth and development and also elicitors which activate the plants immune defense system creating a resistance to pathogen attack.

Amino and organic acids help in the sequestering, uptake and translocation of nutrients. The L- Amino acids are the basic components of protein, which are essential for structural and enzymatic activities.

Plants normally synthesize their own amino acids, but under stress may break down protein to provide the essential amino acids. Use of Bio-Amino Nitrogen™ helps to supply needed L- amino Acids to eliminate stress, provide the building blocks for protein synthesis and a nitrogen source.

Bio-stimulants enhance utilization and translocation of nutrients in plants and the soil. These components are also utilized as a food source to the plant and soil mycorrhizae which may benefit in root and plant development.



#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	4.0%
3.6% Amino Acid Nitrogen	
0.40% Urea Nitrogen	
Available Phosphate (P2O5)	1.0%
Soluble Potash (K <sub>2</sub> O)	1.0%

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 50 parts water to 1 part of BAICOR® fertilizer. Add at least 50 parts water before introducing product.

#### FOLIAR APPLICATIONS:

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 100 parts of water before introducing product.

#### TANK MIX:

1 pint (500 mls) per 100 gallons (400 liters) of water to enhance sequester the utilization of plant uptake of fertilizer blends and foliars.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 - 1.5 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 3 quarts per acre with irrigation water.
Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 50 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.



1 U.S. Gallon ⋅ Net Weight 9.52 lbs. 3.78 Liters ⋅ 4.32 Kg.

## High Tide™

**HIGH TIDE™** is a high concentrate of Seaweed (Ascophyllum Nodosum).

It contains natural organic acids, amino acids and detergents to enhance uptake and facilitate translocation to cellular sites of activity.

High Tide™ is an active source of plant growth regulators (cytokinins), enzymatic and non-enzymatic antioxidants which may do the following:

- Improves stress and temperature tolerance to treated crops.
- Give disease resistance and protect cellular membranes.
- Increase nutrient uptake, efficiency, and growth stimulation.
- Improves salt tolerance.
- Enhance the establishment of new seedlings.
- Retard plant senescence.

Early applications are beneficial to help plants deal with early season temperature and disease stresses while helping to maximize plant development yield and quality.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)
0.55% Urea Nitrogen 0.45% Ammoniacal Nitrogen
0.45% Ammoniacal Nitrogen
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )2.0%
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#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### **AERIAL APPLICATIONS:**

Use at least 50 parts water to 1 part of BAICOR® fertilizer. Add at least 50 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 200 parts water to 1 part BAICOR® fertilizer. Add at least 200 parts of water before introducing product.

#### **FRUIT, NUT & VINE CROPS:**

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.25 - 0.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.25 - 0.5 quarts per acre.

GRAIN CROPS: Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 200 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

1 qt/acre

2.5 qts/acre 4 qts/acre

Maintenance Concentration Beginning Deficiency Severe Deficiency





1 U.S. Gallon · Net Weight 9.2 lbs. 3.78 Liters · 4.17 Kg.

## Gene's Turf Booster® 19-2-2 + Iron

**GENES BOOSTER®** is specially formulated for crops and plants that utilize high amounts of nitrogen. GENES BOOSTER® is chelated with organic and amino acids found naturally in plants and soil. GENES BOOSTER® contains three forms of nitrogen for fast and long term uptake as well as phosphorus, potassium and chelated iron.

GENES BOOSTER® is readily absorbed by the plant, translocated to various tissues and metabolized for optimum growth and development.

• Iron Chlorosis is a world-wide problem. Almost all soils have adequate total iron. The amount of available iron to the plant is dependent on factors such as soil pH, iron forms and plant species. Iron is one of the least understood nutrients and the analysis (both soil and plant) is not accurate to determine effective levels for plant use. Foliar sprays of iron are the preferred way to supply this essential nutrient to plants. Iron may be quite immobile when taken up through the roots; thus new growth often has iron deficiency.

#### **Benefits of GENES BOOSTER®**

- The chelating agents contained in GENES BOOSTER® are rapidly absorbed into the plant tissue to provide rapid and sustained green-up.
- Provides both nitrogen and iron in high concentrations. Both nutrients are crucial to healthy greening due to their direct involvement in chlorophyll formation.
- Will mix in most solutions containing phosphate because of the total chelation of the micronutrients. The nutrients are readily absorbed by the plant for a faster response.
- Contains unique forms of phosphorus and potassium for complete plant use and balanced plant health.

 Compatible with most fertilizers, herbicides and pesticides available on the market today, however a jar test is recommended.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	19.0%
4.1% Ammoniacal Nitrogen	
3.8% Nitrate Nitrogen	
11.1% Urea Nitrogen	
Available Phosphate (P2O5)	
Soluble Potash (K <sub>2</sub> O)	2.0%
Iron (Fe)	1.0%
1.0% water soluble iron (Fe)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 100 parts of water before introducing product.

#### **GRASS & PASTURE APPLICATIONS:**

Apply 16oz/1000 square feet (5 gallons per acre). Apply adequate amount of water (30-100 parts water to 1 part fertilizer). Consult a verified consultant on rate and recommendations for total nitrogen required per 1000 square feet per growing season. Apply monthly during the growing season, or as needed. (Note) this dilution ration is recommended for established grass. Newly seeded turf requires a high dilution (60-100 parts water to 1 part fertilizer).

#### CROPS REQUIRING HIGH AMOUNT OF NITROGEN:

Apply 2 - 4 quarts per acre at 100x dilution with water. Consult a verified consultant on rate and time of application.



1 U.S. Gallon • Net Weight 10.8 lbs. 3.78 Liters • 4.9 Kg.

## Nutra-Gel® 12-13-9 + micros

**NUTRA-GEL®** is an excellent all-purpose fertilizer as well as a great starter for your plants, providing continuous fertilization for up to 3-6 months. After its nutrients are exhausted, the gel continues to act as an absorbent and can even take up new nutrients, providing plants with better growing conditions.

NUTRA-GEL® is a unique and advanced fertilizer unlike any other. Infiltrated in this gel are all the essential nutrients, which are required by plants. These nutrients are in a specially balanced formula designed for optimum plant growth. This gel alone can hold up to 200-400 times its own weight in water, which helps to keep the moisture in the soil.

#### **Benefits of NUTRA-GEL®**

- Excellent starter fertilizer.
- Needs only one application, lasts 3-6 months for continuous feeding.
- Alleviates transplant shock: When used in transplanting, NUTRA-GEL® can help in increasing the survival rate of the plant.
- Contains all Essential nutrients for optimum plant health.
- Patented technology.
- Produces more robust plants: the balance of nutrients contained in NUTRA-GEL® provides optimal growth.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	12.0%
8.0% Ammoniacal Nitrogen	
4.0% Nitrate Nitrogen	
Available Phosphate (P2O5)	13.0%
Soluble Potash (K <sub>2</sub> O)	9.0%
Iron (Fe)	
0.1% water sSoluble iron (Fe)	
Molybdenum (Mo)	0.0005%
0.0005% water soluble molybdenum (Mo)	

#### ALSO CONTAINS NON-PLANT FOOD INGREDIENTS: Soil Amending Guaranteed Analysis

Active Ingredient: 65.8% Polyacrylamide Inert Ingredient: 34.2% Fertilizer

#### **Soil Application Rates**

Pot Size	Nutra Gel Amount
2 1/2 inch	1/5 teaspoon (1 pinch)
	1/2 teaspoon ` '
6 inch	1 teaspoon
8 inch	1 1/2 teaspoons
1 gallon	1/2 Tablespoon
2 gallon	1 Tablespoon
5 gallon	2 Tablespoons
15 gailon	6 Tablespoons (3 oz.)1 lb.
1 cubic yard	1 lb.

#### For Contractors & Professionals

1lb of Nutra-Gel per cubic yard

Spade Size Width / Soil	Nutra Gel
42" / 0.25 cubic yards	0.25 lbs.
67" / 1.5 cubic vards	1.5 lbs.
90" / 3.5 cubic vards	3.5 lbs.
1.000 square feet	2 to 4 lbs
10.000 square feet	20 to 40 lbs
2 Cubic ft. potting soil ba	g2 Tablespoons

## WATER CONSERVANCY PRODUCT Absorbs over 200x its own weight in water.



## Alfalfa Blend<sup>™</sup> 5-8-8

**ALFALFA BLEND™** is specifically formulated for alfalfa and nitrogen fixating plants. Yield, relative feed value (RFV), protein and fiber content, and other valuable components are important for alfalfa crops. ALFALFA BLEND™ is a foliar fertilizer with a balanced phosphorus, potassium and nitrogen content containing high levels of trace nutrients, iron, copper, boron, molybdenum and cobalt. It is an ideal product to enhance plant growth and development.

#### Other Benefits of ALFALFA BLEND™

- Potassium is required in high amounts for its many functions in plants. Over 40 enzymes require it for their activity. In addition, potassium is essential for the control of the stomata and thus is important in maintaining turgidity of plants and photosynthetic activity. Potassium is present in the readily usable organic acid form.
- Nitrogen is required for the over-all growth and development of the plant. Important components such as amino acids, proteins, nucleic acids, etc., all contain nitrogen.
- Phosphorus is readily absorbed by the plant cells and is required for energy processes in the cells of plants.
- Molybdenum, Iron, Copper and Boron are contained in this product, which are all essential for good plant growth and development.
- Molybdenum is required for the conversion of nitrates to amino acids and protein. Molybdenum is essential for nitrogen fixation that occurs in plants such as alfalfa or microorganisms.
- Boron is required for hormone maintenance and carbohydrate conversion or translocation.
- Iron is essential for chlorophyll formation. Iron is also required by the plant for many metabolic roles including nitrate reduction, nitrogen fixation and photosynthesis. Iron is an activator and component for many enzymes that control plant growth.

 ALFALFA BLEND™ is recommended to be applied at any cycle of growing season, before first crop cutting (when sufficient leaves are present.) to enhance the yield and the RFV/protein of the crop.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	5.0%
Available Phosphate (P2O5)	8.0%
Soluble Potash (K <sub>2</sub> O)	
Boron (B)	0.1%
0.1% water soluble boron (B)	
Copper (Cu)	0.1%
0.1% water soluble copper (Cu)	
Iron (Fe)	0.5%
0.5% water soluble iron (Fe)	
Molybdenum (Mo)	0.02%
0.02% water soluble molybdenum (Mo)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### ALFALFA:

Apply 4 - 6 quarts of Alfalfa Blend at early stages of growth and after each cutting.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre.

GRAIN CROPS: Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	. 4 qts/acre
Beginning Deficiency	. 5 qts/acre
Severe Deficiency	. 6 ats/acre

1 U.S. Gallon • Net Weight 10.52 lbs. 3.78 Liters • 4.77 Kg.

### **Calphos**®

Calphos<sup>®</sup> is a unique product like no other. Through the innovation of our research team. Baicor® has been able to produce a product with high amounts of Calcium and Phosphorus that remain in solution. Calcium is primarily taken up through the root tips in the soil. In times of peak calcium demand, the plant may not be able to satisfy its needs by root uptake. This results in internal brown spot for potatoes, blossom end rot in tomatoes, bitter pit in apples etc. Foliar addition of calcium assures adequate nutrients for membranes, cell wall development and plant structure.

#### **Benefits of Calcium**

Essential for cell wall formation and structure, necessary for development of firm fruit and vegetables.

- Regulates nutrient uptake by roots throughout the entire plant. Helps grain and seed development.
- Essential for early and new root growth, enhances pollen germination.
- Necessary for protein and sugar transfer throughout the plant.
- Stronger cell walls which helps resist disease and stress conditions.

#### Benefits of **Phosphorus**

- Phosphorus can be quickly absorbed by the tissue and is very effective when applied as a foliar.
- The highest distribution of phosphorus within the plant is in the cell plasma and it is a key ingredient in the many energy requiring reactions in the plant.

• Plants with high level of phosphorus have increased tolerance to many stress conditions. Good phosphorus levels also help turf grass recover from stress or injury more rapidly. There are also some indications by researchers that Phosphorus plays a key role in reducing disease infections.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)7.0%	
0.4% Ammoniacal Nitrogen	
4.7% Nitrate Nitrogen	
1.9% Urea Nitrogen	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )2.8%	
Calcium (Ca)6.0%	
6.0% water soluble calcium (Ca)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### **AERIAL APPLICATIONS:**

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1-3 quarts per acre with irrigation water.
Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration . . . . . . . . 2 qts/acre Beginning Deficiency . . . . . . . . . . . 3 qts/acre Severe Deficiency . . . . . . . . . . . . 4 qts/acre

> 1 U.S. Gallon · Net Weight 11.28 lbs. 3.78 Liters • 5.12 Kg.

## High Phos<sup>TM</sup> 8-25-3

**HIGH PHOS™** is a unique source of high phosphorus with potassium designed for use in the soil. It is meant to be added to the soil through the drip line, sprinkle irrigation or banding near the plant as a supplement to complete soil nutrition.

Phosphorus is required in high levels to supply the many energy requiring reactions in the metabolism of the plant. The polyphosphate is readily converted into usable forms and is soluble in the soil solution for uptake into the plant.

The balanced formulation of essential nutrients contains organic and amino acids to stabilize the nutrients and facilitate their chelation, uptake, translocation and use.

#### **GUARANTEED ANALYSIS**

Total Nitrogen(N)	8.0%
7.0% Ammoniacal Nitrogen	
1.0% Nitrate Nitrogen	
Available phosphate (P2O5)	25.0%
Soluble potash (K <sub>2</sub> O)	

#### **Soil Application Rates**

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Best results are obtained when High Phos™ is applied to the root zone.

Maintenance Concentration	 1 qt/acre
Beginning Deficiency	 2 gts/acre
Severe Deficiency	 3 ats/acre





1 U.S. Gallon · Net Weight 11.6 lbs. 3.78 Liters · 5.26 Kg.

### Micro-Mix\*\*\*

MICRO-MIX™ is a high zinc trace nutrient fertilizer that contains complexed zinc, iron, manganese and boron to satisfy the needs of your plants for essential micronutrients. The micro-nutrients are completely complexed and contain a base of natural organic and amino acids, which are readily biodegradable, and supply energy to the plant.

MICRO-MIX™ is an excellent product to be used as a starter fertilizer or in banding applications. It is an essential foliar for effective micro-nutrient uptake. MICRO-MIX™ may be mixed with 10-34 at proper dilutions (jar test is recommended when mixing with 10-34). The organic acids, amino acids, and carbohydrates make this an excellent general purpose foliar/soil product when more than one trace element nutrient is deficient.

#### Other Benefits of MICRO-MIX™

- MICRO-MIX™ is designed to provide effective uptake, translocation and utilization to the growth site.
- Nutrients are quickly absorbed by the plant for a fast response.



#### **GUARANTEED ANALYSIS**

Magnesium (Mg)	0.50%
0.50% water soluble magnesium (Mg)	
Boron (B)	0.1%
0.1% water soluble boron (B)	
Iron (Fe)	0.7%
0.7% water soluble iron (Fe)	
Manganese (Mn)	1.2%
0 ( )	3.0%
1.2% water soluble manganese (mn) Zinc (Zn)	3.0%

#### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**AERIAL APPLICATIONS:** Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

**FOLIAR APPLICATIONS:** Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 per acre.

**SPRINKLER IRRIGATION:** Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration . . . . 1 qt/acre
Beginning Deficiency . . . . 2 qts/acre
Severe Deficiency . . . . 3 qts/acre

1 U.S. Gallon · Net Weight 10 lbs. 3.78 Liters · 4.54 Kg.

## Gold Star® 10-9-5 + Micronutrients

**Gold Star® 10-9-5** is a specialized balanced nutrient package that is a truly chelated fertilizer for effective nutrient uptake.

Gold Star® is specially formulated to be used as a starter or in banding for soil applications as well as an effective foliar fertilizer during the crop growing season. It can also be applied with drip line irrigation systems and fertigation/injector, pivot and line systems. This product works great in greenhouse production.

#### Benefits of Gold Star® 10-9-5

- Contains a unique proprietary combination of plant-based amino acids, organic acids and complex carbohydrates, which are found naturally in plants and soil. These are also used as a food source by both plants and micro-organisms for energy. Gold Star® also contains the secondary nutrient (Magnesium) and a full range of micronutrients (Iron, Zinc, Manganese, Copper and Boron) which are 100% chelated to alleviate most deficiencies.
- Thoroughly efficient Gold Star® contains high levels
  of readily available phosphorus for the plant's cells
  and is rapidly absorbed by the plant. Phosphorus
  is a key ingredient in the photosynthetic process
  needed for plant growth and development.
  Phosphorus is required for energy processes in
  the cells of plants.
- Compatible with most fertilizers, herbicides and pesticides available on the market today, however a jar test is recommended.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	10.0%
0.6% Nitrate Nitrogen	
7.2% Urea Nitrogen	
Available Phosphate (P2O5)	9.0%
Soluble Potash (K <sub>2</sub> O)	5.0%
Magnesium (Mg)	0.5%
0.5% water soluble magnesium (Mg)	
Boron (B)	0.05%
0.05% water soluble boron (B)	
Copper (Cu)	0.05%
0.05% water soluble copper (Cu)	0.50/
Iron (Fe)	0.5%
0.5% water soluble iron (Fe)	0.40/
Manganese (Mn)	0.4%
0.4% water soluble manganese (Mn) Zinc (Zn)	0.6%
0.6% water soluble zinc (Zn)	0.0 /0
0.070 Water soluble Zillo (ZII)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### FOLIAR APPLICATIONS:

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 per acre.

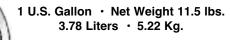
#### SPRINKLER IRRIGATION:

Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	2 gts/acre
Beginning Deficiency	
Severe Deficiency	



## Starter<sup>M</sup>

Crops respond well to optimum levels of fertilization both in terms of yield and quality. In addition to soil and plant analysis, fertilizer rates are dependent on a number of factors, such as time of harvest, variety, plant population, and previous crop. Soil tests, plant tissue analysis and observations of visual deficiency symptoms are important diagnostic tools when problems with micronutrients are suspected.

Starter™ has been formulated to mix with a Mark-Out blend. When applied in the soil it will generally aid in the uptake of nutrients for the plant.

In addition to your fertilizer program, Baicor® suggests a nutritional supplementation program for potatoes, vegetables and other crops as follows:

- 1 Use Starter™ in combination with mark-out fertilizers. mark-out application rates should be based on soil test recommendations. Use markout or side dressing next to the tuber/seed, the product should not come in contact with the tuber or seed.
- 2 Pre-plant with liquid fertilizers and/or fungicides: Add 1 to 1.5 gallons Starter™ per acre and apply in the soil.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	2.0%
Available Phosphate $(P_2O_5)$	2.0%
Soluble Potash (K <sub>2</sub> O)	
Boron (B)	
0.002% water soluble boron (B)	
Cobalt	0.002%
0.002% water soluble cobalt	
Iron (Fe)	0.2%
0.2% water soluble iron (Fe)	
Manganese (Mn)	0.3%
0.3% water soluble manganese (Mn)	0.0000/
Molybdenum (Mo)	0.002%
0.002% water soluble molybdenum (Mo) Zinc (Zn)	0.8%
0.8% water soluble zinc (Zn)	

#### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**FRUIT, NUT & VINE CROPS:** Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 2 gallons per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 qt - 1 gallon per acre.

GRAIN CROPS: Apply 1 qt - 1 gallon per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 qt - 1 gallon per acre.

**SOIL APPLICATION RATES:** Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration . . . . 1 gal/acre
Beginning Deficiency . . . . 1.5 gal/acre
Severe Deficiency . . . . 2 gal/acre

Use a jar test for fertilizer compatibility.



1 U.S. Gallon • Net Weight 10.3 lbs. 3.78 Liters • 4.67 Kg.

### Stress Reducer

1-2-2

Stress Reducer™ includes molecules in the plant that induce plant defense responses. These include molecules in the plant called elicitors that may be derived from biological or chemical compounds. Generally biotic elicitors trigger plant responses at high concentrations. The duration of protection is variable depending on elicitor, crop type of stress. Research has shown heat, cold, salt, other types of environmental stresses, disease and maintaining a healthy plant are often induced by elicitors for weeks or months. For example low concentrations of elicitors may provide protection for plants to grow in a salty soil that in their absence cannot sustain life.

#### Benefits of Stress Reducer™

- Stress Reducer<sup>™</sup> contains various chemicals (abiotic) Silicon molybdenum, cobalt, zinc, etc., which are known as elicitors.
- Organic Acids and Amino Acids are present to help in the absorption and translocation of nutrients.
- Potassium is present to maintain stomatal control and assist in foliar uptake.
- Chelated micronutrients enhance uptake through the roots and are ideal for dripline systems.
- Elicitors trigger mechanisms within the plant to resist stresses (diseases, environmental: Heat, cold, salinity, etc.).
- Elicitors signal plants to form phytoalexins (low molecular weight compounds that offer plant resistance).
- Elicitors may be added to the plant as a foliar or through root absorption.
- Elicitors are biotic (pathogen origin) or abiotic (heavy metals, antibiotics and detergents). These include NBE® (natural biological extracts), kelp, yucca, cobalt, molybdenum, hydrogen peroxide, etc.

#### **GUARANTEED ANALYSIS**

Total Nitrogen(N)	1.0%
Available Phosphate (P2O5)	2.0%
Soluble Potash (K <sub>2</sub> O)	
Cobalt (Co)	0.002%
0.002% water soluble cobalt (Co)	
Copper (Cu)	0.05%
0.05% water soluble copper (Cu)	
Iron (Fe)	0.10%
0.10% water soluble iron (Fe)	
Manganese (Mn)	0.05%
0.05% water soluble manganese (Mg)	
Molybdenum (Mo)	0.003%
0.003% water soluble molybdenum (Mo)	
Zinc (Zn)	0.05%
0.05% water soluble zinc (Zn)	
Nickel (Ni)	0.01%
0.01% water soluble nickel (Ni)	
Silicon (Si)	0.01%
0.01% water soluble silicon (Si)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 40 parts water to 1 part of BAICOR® 1-2-2. Add at least 20 parts water before introducing product.

FOLIAR APPLICATIONS:
Use at least 100 parts water to 1 part BAICOR® 1-2-2. Add at least 50 parts water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1- 2 gallons per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for

FIELD AND VEGETABLE CROPS: Apply 2 gt - 1 gallon per acre.

GRAIN CROPS: Apply 2 qt - 1 gallon acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 2 gallons per acre with irrigation water. Use check valve to prevent back flow into water system.

#### **SOIL APPLICATION RATES:**

Use at least 40 parts water to 1 part BAICOR® 1-2-2. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

 Beginning stress
 1. gal/acre

 Severe Stress
 1 - 1.5 gal/acre

> 1 U.S. Gallon · Net Weight 9.1 lbs. 3.78 Liters • 4.13 Kg.



## Penetrator Ionic-Surfactant

**Penetrator™** is a special formulation of natural organic materials that act as a surfactant, wetting agent and penetrant.

This product contains a natural agent that lowers surface tension and aids in surface interaction of the plants and soil for improved nutrient availability or pesticide effectiveness.

The concentration of organic acids provides an excellent buffering agent in soil and water. Penetrator increases the effectiveness of certain herbicides, insecticides, and fertilizers.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)......2.0% 2.0% Urea Nitrogen

### ALSO CONTAINS NON PLANT FOOD INGREDIENTS

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

Surfactant for insecticides, herbicides, fertilizers and insecticides ect.

With weed killers, bug killers, fungus killers and defoliants use 0.5 oz to 1.0 oz of Penetrator per gallon of water.

With insecticides, fungicides, herbicides and defoliants use 0.5 to 1 oz per gallon of water.

Use the same rate when used as a wetting agent, buffer, or aid for nutrient uptake, translocation or availability. Also use 0.5 to 1 oz per gallon of water.

Always do a jar test first.

1 U.S. Gallon • Net Weight 9.12 lbs. 3.78 Liters • 4.13 Kg.

### Foliar Friend® "Non-lonic Sticker / Spreader"

FOLIAR FRIEND® is an organic-based surfactant (wetting agent) that helps fertilizers and other products penetrate deep into the leaves of plants to increase their effectiveness.

It is a special formulation of natural organic materials that act as a surfactant, wetting agent and penetrant. (Decreases the droplet size and maximizes liquid on the leaf surface area of plant.)

FOLIAR FRIEND® also helps to open up the soil and increase penetration.

FOLIAR FRIEND® enhances performance and uptake of nutrients, herbicides and pesticides by assisting in penetration through the waxy cuticles of leaves!

#### **GUARANTEED ANALYSIS**

Active Ingredients: ......2.0% Saponin

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### **AERIAL APPLICATIONS:**

Use at least 1000 parts water (1 pint / 125 gallons) per acre to 1 part of BAICOR® fertilizer. Add at least 400 - 800 volumes of water before other additives are introduced.

Add 16 ounces of Foliar Friend™ (1 pint) per 125 gallons of water (0.4 liters per 400 liters) per acre. When mixing, add at least 100 volumes of water before other additives are introduced.

#### FRUIT. NUT & VINE CROPS:

Add 16 ounces of Foliar Friend™ (1 pint) per 125 gallons of water (0.4 liter per 400 liters) per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

Add 16 ounces of Foliar Friend™ (1 pint) per 125 gallons of water (0.4 liter per 400 liters) per acre. When mixing, add at least 100 volumes of water before other additives are introduced.

#### SPRINKLER IRRIGATION:

Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use 1 - 4 quarts per 100 gallons of water per acre. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.



1 U.S. Gallon · Net Weight 8.5 lbs. 3.78 Liters · 3.86 Kg.

## BAICOR® Chelates NOT ALL CHELATES ARE CREATED EQUAL

The main reason our chelates are preferred over other forms of fertilizer is the effectiveness, compatibility and stability in mixing with other nutrients and products. They protect the nutrient from falling out (precipitating) and assists in the plant uptake and translocation.

The organic based chelates have a high stability constant, are bio-degradable and can be used by the plant as an energy source. Chelates are in the most available form for immediate use for plant growth, translocation and development. Chelates may be combined directly with nitrogen, phosphate and potassium, and will remain in a true solution.

#### **COPPER CHELATE 5.0%**

Crucial for photosynthesis, respiration, seed, chlorophyll formation, amino acid conversion and zinc uptake.

1 U.S. Gallon • Net Weight 10.12 lbs. 3.78 Liters • 4.59 Kg.

#### **IRON CHELATE 4.7%**

Essential for chlorophyll formation.

Catalyzes many enzymatic reactions essential for respiration and photosynthesis.

1 U.S. Gallon • Net Weight 11.67 lbs. 3.78 Liters • 5.29 Kg.

#### **MAGNESIUM CHELATE 5.0%**

Aids phosphorus use in energy transformation, seed germination, nitrogen metabolism, chlorophyll formation and growth.

1 U.S. Gallon • Net Weight 10.32 lbs. 3.78 Liters • 4.68 Kg.

#### **MANGANESE CHELATE 5.0%**

Aids nitrogen utilization, phosphorous and magnesium uptake.

Serves as an activator for enzymes.

1 U.S. Gallon • Net Weight 10.472 lbs. 3.78 Liters • 4.75 Kg.

#### **GUARANTEED ANALYSIS**

Copper (Cu)5.	0%
5.0% water soluble copper (Cu)	

#### **GUARANTEED ANALYSIS**

Iron (Fe)4.7%
4.7% water soluble iron (Fe)

#### **GUARANTEED ANALYSIS**

Magnesium (Mg)	5.0%
5.0% water soluble magnesium (Mg)	

#### **GUARANTEED ANALYSIS**

Manganese (Mn)	5.0%
5.0% water soluble manganese (Mn)	



### Zinc Chelate 5%

**ZINC CHELATE** is chelated with organic and amino acids. It is an excellent soil and foliar fertilizer which helps to prevent and relieve zinc deficiencies. The mixture of organic and amino acids, and selected carbohydrates facilitate its entry into the plant and utilization when used as a foliar or in the soil. This product is readily absorbed by the plant, translocated to various tissues, and metabolized for optimum growth and development.

ZINC CHELATE may be combined directly with other Baicor® fertilizers and will remain in solution. All plants require 13 essential nutrients in addition to carbon dioxide, water, and light. If any one of the nutrients is missing or deficient, the plant will not complete its normal life cycle. Zinc is required in high micro-levels by plants for maintaining enzymatic activity and auxin levels. It is involved in the production and use of growth regulators as well as making enzymes function correctly. A deficiency of zinc greatly reduces plant growth and quality of crops such as potatoes, sugar beets and wheat. ZINC CHELATE has been tested against other well known competitor products in independent studies and has been shown to have significantly greater uptake and accumulation.

#### **Benefits of ZINC CHELATE**

- Increases leaf, fruit size, and quality
- Helps calcium translocation
- Essential in uniform seed formation
- Enzyme activator
- Essential for transformation of carbohydrates and helps regulate consumption of sugars to promote plant growth

#### **Deficiency Symptoms:**

- Zinc deficiency is found in the new growth of the plant.
- Abnormal leaf size (small) and shape occur. Reduced chlorophyll, usually recognized by chlorotic rosette appearance or yellowed areas in new leaves.

 Reduced set, fruit development and size.
 Deficiencies will lower crop yield and quality.

#### **GUARANTEED ANALYSIS**

Zinc (Zn) ......5.0% 5.0% water soluble zinc (Zn)

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### **AERIAL APPLICATIONS:**

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration . . . 1 qts/acre
Beginning Deficiency . . . 2 qts/acre
Severe Deficiency . . . . 3 qts/acre

1 U.S. Gallon • Net Weight 10.675 lbs. 3.78 Liters • 4.84 Kg.

### Calcium Chelate 5%

**CALCIUM CHELATE 5.0%** is chelated with organic and amino acids. It has a stability constant high enough to be mixed with phosphorus and remain in true solution. The mixture of organic and amino acids, and selected carbohydrates facilitate its entry into the plant and utilization when used as a foliar or in the soil. This product is readily absorbed by the plant, translocated to various tissues and metabolized for optimum plant growth and development.

Calcium is taken up through the root tips in the soil. In times of calcium demand the plant may not be able to satisfy its needs by root uptake. This results in internal brown spot for potatoes, blossom end rot in tomatoes, etc. Foliar addition of calcium assures adequate nutrients for membranes, cell wall development and plant structure.

#### **Benefits of CALCIUM CHELATE 5.0%**

- Essential for cell wall formation, structure, development, and necessary for development of firm fruit and vegetables.
- Regulates nutrient uptake by roots throughout the entire plant, and helps grain and seed development.
- Essential for early root growth, new root growth and enhances pollen germination.
- Necessary for protein and sugar transfer throughout the plant.
- Essential for stronger cell walls helps resist disease and stress conditions.

#### **Deficiency Symptoms:**

- Death of growing parts (terminal buds & root tips), poor root development, yellowing of tissue, brittleness of leaf and stem tissue, fruit and vegetable disorders, premature shedding of blossoms and buds.
- The apical (new growth) of plants (roots, leaves and buds) is stunted and even die back of new growth.
   Abnormalities such as blossom end rot of tomato fruit, loss of cellular structure in apples (bitter-pit) and hollow heart of potatoes may occur.

#### **GUARANTEED ANALYSIS**

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### **AERIAL APPLICATIONS:**

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration . . . 1 qts/acre
Beginning Deficiency . . . 2 qts/acre
Severe Deficiency . . . 3 qts/acre

1 U.S. Gallon · Net Weight 10.7 lbs. 3.78 Liters · 4.85 Kg.

### Calcium + Boron

A blend of **Calcium** and **Boron** complexed with organic acids, amino acids and carbohydrates designed to provide these nutrients to the plant by foliar, soil, and banding. Calcium and Boron often work together in preventing blossom end rot, potato tuber problems etc. Readily taken up by the plant and utilized.

Calcium is essential for the structural strength of plants and assists in the uptake of nutrients into sites where they are required.



#### **GUARANTEED ANALYSIS**

Calcium (Ca)	5.0%
5.0% water soluble calcium (Ca)	
Boron (B)	1.0%
1.0% water soluble boron (B)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### FOLIAR APPLICATIONS:

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT. NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 - 1.5 quarts per acre.

**GRAIN CROPS:** Apply 0.5 – 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1-3 quarts per acre with irrigation water.
Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	1 gts/acre
Beginning Deficiency	
Savara Deficiency	2 atc/sero



### BAICOR® Complexes

Complexes are not 100% chelated products and are not meant to be mixed with phosphorus in general. Some companies consider and sell their complexes as chelated which is misleading; **we want you to know the difference.** 

Our complexes are extremely effective. We use natural organic and amino acids and carbohydrates to help in greater translocation and uptake for the plant. *The nutrients are generally higher in percentage and are less costly as well.* 

#### **COMPLEXED ZINC 13%**

- Increases leaf and fruit size & quality
- Helps calcium translocation
- Essential in uniform seed formation

1 U.S. Gallon • Net Weight 12.08 lbs. 3.78 Liters • 5.48 Kg.

#### COMPLEXED POTASSIUM 1-0-10 & 1-0-23

- Maintains turgor in cells, improves color in fruits
- Necessary for formation of sugars and many enzymatic reactions.

1 U.S. Gallon · Net Weight 10.8 & 10.6 lbs. 3.78 Liters · 4.9 & 4.8 Kg.

### COMPLEXED PHOSPHOROUS 3-12-0

- Promotes root flower and seed development
- Energy transformation and storage
- Formation of RNA and DNA

1 U.S. Gallon • Net Weight 9.4 lbs. 3.78 Liters • 4.26 Kg.

#### **COMPLEXED IRON 5.0%**

- Essential for chlorophyll formation
- Catalyzes many enzymatic reactions essential for respiration and photosynthesis

1 U.S. Gallon • Net Weight 10.09 lbs. 3.78 Liters • 4.58 Kg.

### COMPLEXED MANGANESE 10.0%

- Aids nitrogen utilization, phosphorous and magnesium uptake
- Serves as an activator for enzymes

1 U.S. Gallon • Net Weight 11.68 lbs. 3.78 Liters • 5.30 Kg.

Each of these products contains an organic base. The complexed metals are in the available form for immediate use for plant growth and development. The natural organic base is fully biodegradable providing energy for cellular metabolism.



### BAICOR® Complexes

#### **COMPLEXED CALCIUM 12.0%**

- Regulates nutrients uptake by roots to the entire plant
- Maintains cell wall development for firmer fruits and vegetables

1 U.S. Gallon • Net Weight 11.6 lbs. 3.78 Liters • 5.26 Kg.

### COMPLEXED CALCIUM A+ 10-0-0 12%

1 U.S. Gallon • Net Weight 12.4 lbs. 3.78 Liters • 5.62 Kg.

### COMPLEXED MOLYBDENUM 3.0%

Conversion of nitrate to amino acids, essential for nitrogen fixation

1 U.S. Gallon • Net Weight 9. lbs. 3.78 Liters • 4.08 Kg.

#### **COMPLEXED COBALT 3.0%**

 Part of vitamin B12 and essential for nitrogen fixation

1 U.S. Gallon • Net Weight 9.08 lbs. 3.78 Liters • 4.12 Kg.

#### **COMPLEXED BORON 3.0%**

- Assists calcium & sugar uptake
- Important for early growth, flowering and fruit set

1 U.S. Gallon · Net Weight 9.3 lbs. 3.78 Liters · 4.22 Kg.

Each of these products contains an organic base. The complexed metals are in the available form for immediate use for plant growth and development. The natural organic base is fully biodegradable providing energy for cellular metabolism.



### Complexed Silicon 7.0%

Silicon is an essential mineral element for some plants and is beneficial for all higher plants. It can function as an essential trace element in metabolic roles and also accumulate in large quantities in certain tissues, cells and cellular components to enhance physical attributes of plants. Silicon may provide mechanical protection in the epidermal root cells acting as a barrier against pathogen and parasitic invasion. Silicon associates with calcium and pectin in the intercellular wall spaces in the roots providing rigidity and protecting against lodging so important in small grains. This also provides rigidity of leaves improving photosynthetic activity. It reinforces the walls of the vessel cells in the xylem, preventing compression under conditions of high transpiration thus improving sap circulation.

In trace amounts silicon forms silicon – enzyme complexes which function in metabolic roles in photosynthesis and respiratory processes. It has important roles in the formation of new leaves, pollination, fruit formation and fruit storage. Especially in rice and sugarcane significant yield increases have been shown by the addition of silicon.

Baicor Silicon 7% has added natural components including amino acids and Ascophyllum nodosum enhancing uptake, translocation and effectiveness. It also provides elicitor and positive growth regulation. Summary of beneficial effects of Baicor's Silicon 7%.

#### **Physical Action**

- Reduced water loss due to cuticular processes.
- Resistance to fungal attack.
- Increased resistance to lodging and pest.
- Structure rigidity.

#### **Metabolic & Physiological Roles**

- Elicitor action against stresses.
- Enzyme Si complexes that enhances photosynthetic and respiratory processes.
- Leaf formation.
- Pollination and fruit set.
- Increased fruit quality and storage.
- Reduces leaching of phosphorus in sandy soil.
- Plant tolerance to high levels of Mn and Fe.

#### **GUARANTEED ANALYSIS**

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AERIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### **FRUIT, NUT & VINE CROPS:**

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 0.5 – 1.5 quarts per acre. **NOTE**: Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 0.5 – 1.5 quarts per acre.

GRAIN CROPS: Apply 0.5 - 1.5 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 0.5 - 1.5 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1-3 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### SOIL APPLICATION RATES:

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration . . . 1 qts/acre
Beginning Deficiency . . . 2 qts/acre
Severe Deficiency . . . 3 qts/acre

1 U.S. Gallon · Net Weight 9.8 lbs. 3.78 Liters · 4.45 Kg.

### Sulfur 22%

**SULFUR** is a component of essential amino acids and proteins in the plant. It provides the sulfur for amino acids and other compounds that are necessary for many reactions that occur in plant metabolism that increase normal growth and development. Sulfur helps to make nitrogen utilization more efficient. It is also a component that gives certain food crops a distinctive flavor and aroma.

Organic and amino acids are added to make this product more effective as a sulfur source.

Sulfur is required in high amounts by plants and this complexed sulfur is soluble and available for immediate use.

#### COMPLEXED SULFUR 11-0-0 22.0%

- Promotes growth and maturity
- Flavor component
- Makes nitrogen more efficient
- Amino acid component

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	11.0%
10.0% Ammoniacal Nitrogen	
1.0% Urea Nitrogen	
Sulfur (S)	22.0%
22.0% water soluble Sulfur(S)	

#### **Application Rates**

ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

**SPRINKLER IRRIGATION:** Apply 1 – 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration		
Beginning Deficiency	3 qts/ac	re
Severe Deficiency	4 qts/ac	re

#### NOTE: Ensure that your local soils are not high in sulfur.





### BAICOR® Products for Organic Growing

**PRODUCTS FOR ORGANIC USE** are specially formulated with the concerned grower in mind. Based on years of research and application, BAICOR® products can provide the results that certified growers have come to trust. BAICOR® products may be applied to the soil or in irrigation water in addition to foliar applications.

**PRODUCTS FOR ORGANIC USE** contain a series of selected natural organic compounds which chelate or complex nutrients and keep them in functional form until the plant utilizes them. This protects the nutrients from being tied-up within the plant or precipitation by sulfates, silicates and phosphates. The organic base of all BAICOR® products is used as a food source by both plants and micro-organisms and is completely biodegradable thus reducing ground water contamination.

#### THERE IS NO SUBSTITUTE FOR SCIENTIFIC EXPERTISE

#### HIGH TIDE™ 0-0-0 WSDA

High-Tide for organic growing is a high concentrate of Seaweed (Ascophyllum Nodosum). It contains natural organic acids, amino acids and detergents to enhance uptake and facilitate translocation to cellular sites of activity.

1 U.S. Gallon · Net Weight 9.17 lbs. 3.78 Liters · 4.16 Kg.

### FOLIAR FRIEND® (SURFACTANT AND SOIL PENETRANT) OMRI

FOLIAR FRIEND® is a non-ionic organic surfactant, wetting agent and penetrant designed to enhance the spreadability and performance of all foliar applied products. FOLIAR FRIEND® may also be applied on problem soils to assist in penetration of water.

1 U.S. Gallon · Net Weight 8.5 lbs. 3.78 Liters · 3.86 Kg.

#### MICRO-PLENTY™ 2-0-1 (2% Fe, 2% Zn, 2% Mn, 0.1% B) 0MRI

It is an excellent general purpose foliar/soil product when more than one nutrient is deficient. In addition to nitrogen and potassium, MICRO-PLENTY™ has all the essential micronutrients in one package.

1 U.S. Gallon • Net Weight 11.2 lbs. 3.78 Liters • 5.08 Kg.

### PLANT STIMULATOR™ (BIO-STIMULANT & WATER BUFFER) OMRI

PLANT STIMULATOR™ is composed of natural derivatives from plant extracts including carbohydrates, and organic acids. It is 4 products in 1. <u>Bio-Stimulant, Water Buffering Agent, Foliar Enhancer and Promotes Microbes in the soil.</u>

1 U.S. Gallon · Net Weight 9.3 lbs. 3.78 Liters · 4.22 Kg.







## Finally \*\*\* 2.5-0-3.0



**Finally™** is WSDA Organic approved and contains in addition to nitrogen and potassium manganese, zinc, copper, boron, and sulfur.

The nitrogen source is entirely from amino acids. This together with high organic acids provides facilitators, chelators, stabilizing agents, and ready transport through the plant for immediate and later plant nutrition. The amino acids are a mixture of essential amino acids for the plant and are also active biological agents for triggering stress relief in plants (ie. heat, cold, salt, vigorous seedling growth).

The presence of high concentrations of amino acids and selected organic acids provide a special product complete with nitrogen and six other essential nutrients.

#### Benefits of Finally™

- All nitrogen derived from Plant Based Amino Acids.
- Amino Acids essential for growth included.
- Sulfur Amino Acids and sulfur for formulation present.
- Essential micronutrients including copper (Cu), manganese (Mn) and zinc (Zn) are included.
- Organic and Aminio Acids present for chelation, translocation and increased nutrient uptake.
- · Approved when required for organic growing.
- No sodium nitrate (Chilean Nitrate) present.

#### **GUARANTEED ANALYSIS**

Total Nitrogen(N)	2.5%
2.5% Nitrate Nitrogen	
Soluble potash (K <sub>2</sub> O)	3.0%
Soluble potash (K <sub>2</sub> O)Manganese (Mn)	0.05%
0.05% water soluble manganese (Mn)	
Zinc (Zn)	0.05%
0.05% water soluble zinc (Zn)	

#### **Application Rates**

#### ADD WATER FIRST TO TANK OR SPRAYER BEFORE ADDING PRODUCT!

#### AFRIAL APPLICATIONS:

Use at least 20 parts water to 1 part of BAICOR® fertilizer. Add at least 20 parts water before introducing product.

#### **FOLIAR APPLICATIONS:**

Use at least 100 parts water to 1 part BAICOR® fertilizer. Add at least 50 parts of water before introducing product.

#### FRUIT, NUT & VINE CROPS:

Including (but not limited to) almonds, hazelnuts, grapes, pecans and walnuts. Apply 1 - 4 quarts per acre. **NOTE:** Before applying to pome or stone fruit, consult your qualified and licensed consultant for recommendations.

FIELD AND VEGETABLE CROPS: Apply 1 - 4 quarts per acre.

GRAIN CROPS: Apply 1 - 4 quarts per acre at 3-4 leaf stage.

TURF GRASSES: Apply 1 - 4 quarts per acre.

#### SPRINKLER IRRIGATION:

Apply 1 - 4 quarts per acre with irrigation water. Use check valve to prevent back flow into water system

#### **SOIL APPLICATION RATES:**

Use at least 20 parts water to 1 part BAICOR® fertilizer. Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

Maintenance Concentration	2 qts/acre
Beginning Deficiency	dts/acre
Severe Deficiency	qts/acre

### BAICOR® Products for Organic Growing

### **ORGANIC COMPLEXES**

### BORON COMPLEX 3.0% (OMRI)

Boron is essential for plant nutrition but is one of the least understood of all plant nutrients. It is involved in the synthesis and/or translocation of sucrose (sugars) in the plant. It is also connected with cell wall stability as with Calcium. In fact, it will help the absorption of Calcium for cell wall development! It is also necessary for the functioning of growth plant hormones.

1 U.S. Gallon · Net Weight 9.1 lbs. 3.78 Liters · 4.13 Kg.

### MOLYBDENUM COMPLEX 3.0% (WSDA)

All plants require Molybdenum for conversion of nitrates to amino acids and into metabolic compounds, e.g. protein. It is also required by legumes (alfalfa, peas, beans, clover, etc.) for the fixation of nitrogen. Molybdenum is often a forgotten nutrient, although it is essential for growth and development of all plants.

1 U.S. Gallon • Net Weight 9 lbs. 3.78 Liters • 4.08 Kg.

### COBALT COMPLEX 3.0% (WSDA)

Cobalt is part of vitamin B-12 and is essential for all nitrogen fixing plants (peas, beans, alfalfa, etc.) in their symbiotic relationship with nodule bacteria.

1 U.S. Gallon • Net Weight 9.08 lbs. 3.78 Liters • 4.12 Kg.

### FINALLY™ 2.5-0-3 (WSDA)

This Product is OMRI approved and contains in addition to nitrogen and potassium Mn, Zn, Cu, B, and sulfur.

The nitrogen source is entirely from amino acids. This together with high organic acids provides facilitators, chelators, stabilizing agents, and ready transport through the plant for immediate and later plant nutrition. The amino acids are a mixture of essential amino acids for the plant and are also active biological agents for triggering stress relief in plants (ie. heat, cold, salt, vigorous seedling growth).

1 U.S. Gallon • Net Weight 9.5 lbs. 3.78 Liters • 4.31 Kg.









### BAICOR® Products for Organic Growing

### **ORGANIC CHELATES**

### CALCIUM CHELATE 5.0% (OMRI, CDFA)

Calcium is taken up through the root tips in the soil. In times of calcium demand by the plant, it may not be able to satisfy its needs by root uptake. This results in internal brown spot for potatoes, blossom end rot in tomatoes, etc. Foliar addition of calcium assures adequate nutrients for membranes, cell wall development and plant structure.

1 U.S. Gallon • Net Weight 10.6 lbs. 3.78 Liters • 4.81 Kg.

### CHELATED MANGANESE 5.0% (OMRI, CDFA)

Manganese is essential for many enzyme activities and helps control plants natural growth regulator levels. It aids in nitrogen, phosphorus and magnesium uptake and utilization by the plant.

1 U.S. Gallon • Net Weight 10.3 lbs. 3.78 Liters • 4.67 Kg.

### CHELATED MAGNESIUM 2.5% (OMRI, CDFA)

Magnesium is an essential part of the chlorophyll molecule, which is critical for photosynthesis. It helps in the formation of amino acids, vitamins and sugars.

1 U.S. Gallon · Net Weight 10 lbs. 3.78 Liters · 4.54 Kg.

### CHELATED IRON 5.0% (OMRI, CDFA)

Iron is essential for chlorophyll formation. Plants require it for photosynthesis, nitrogen fixation and nitrate reduction. It is an essential activator and component for many enzymes within the cells of plants.

1 U.S. Gallon • Net Weight 10.1 lbs. 3.78 Liters • 4.58 Kg.

### CHELATED COPPER 5.0% (WSDA, CDFA)

Copper plays a critical role in photosynthesis and is necessary for chlorophyll formation. Copper is a component of several important enzymes within the plant, activates enzymes in respiration processes, and aids amino acid to protein conversions. Copper also contributes to the development of color and flavor in fruits and vegetables.

1 U.S. Gallon · Net Weight 9.9 lbs. 3.78 Liters · 4.49 Kg.

### CHELATED ZINC 5.0% (OMRI, CDFA)

Zinc is required by plants in high micro-levels for maintaining enzymatic activity and auxin levels. It is involved in the production and use of growth regulators. A deficiency of zinc greatly reduces plant growth and quality of all crops.

1 U.S. Gallon • Net Weight 10.6 lbs. 3.78 Liters • 4.82 Kg.

### F.A.Q.s

#### What is Baicor®?

Baicor® is a specialty fertilizer company that manufactures products for Agriculture, Home and Garden, and Turf. The plant is owned and operated in Logan, Utah, and all products are manufactured in the USA. Many products are designed for application on the leaves (foliar) but nutrients for the soil are also available. Facilitators are added to all nutrients to assist in uptake, translocation, and plant development.

#### What are Facilitators?

Organic acids, amino acids, carbohydrates, and other natural products are used by certain plants to form chelates, increase uptake through leaf cuticle or root, translocate to various parts of the plant and increase the effectiveness for growth and development. Such components are added to Baicor products to facilitate these same actions.

#### What are Chelates?

Certain Nutrients such as iron, zinc, copper, manganese, etc. are often fixed in the soil and made unavailable to plants. Chelates (a word meaning claw) are compounds that hold nutrients from soil fixation and release them on uptake for plant use.

Natural chelates are components such as organic acids and amino acids that are recognized by the plant, can be broken down and the nutrients released; the chelating substances can then be used for energy by the plant.

### What does the Plant require for Growth and Development?

Plants are remarkable organisms; they require sunlight (for photosynthesis), carbon dioxide (to make the myriad of compounds needed for growth and development), water, air, and 13 mineral nutrients (nitrogen, potassium, phosphorus, sulfur, magnesium, calcium, iron, manganese, zinc, copper, boron, chlorine, and molybdenum). A healthy plant with these components is able to grow and develop; it makes its own vitamins, fats, proteins, etc. required for its metabolism.

#### Why use a foliar?

Foliar application is the economical and effective way of providing the nutrients in a usable form, thus eliminating soil fixation.

Foliar application does not replace good soil management but supplements it in cases where soil nutrient fixation takes place or nutrients are required by the plant at a particular time for growth and development. Baicor's foliars are specially designed for foliar use as well as soil application. Our foliars are specifically designed to put the desired nutrients from the specified product into the plant through the leaf. The foliars are absorbed immediately (within hours) to help provide needed nutrients for growth, color, stamina, quality of plant, flower and fruit or vegetable. Use of foliars helps stimulate roots to take nutrients from the soil.

### How are Baicor® micronutrients different from other?

Our micronutrients have added facilitators which chelate nutrients in their usable form and help translocate them to the sites of growth and development. These facilitators are natural components such as organic acids, amino acids, and carbohydrates. They are compatible with other components such as phosphorus, and have a long shelf life.

Not all products are created the same. For example, Iron Chelate may look the same from a customer standpoint (the name) but there are many differences, such as raw materials used (ingredients) for effectiveness. Compatibility with other products, does it mix with other nutrients? Is the product chelated or complexed? Complexed is another word for weak chelate in simple terms. Micronutrients may also differ as to uptake, translocation and effectiveness.

#### What Baicor® Fertilizers are available?

All nutrients required by the plant are available as single nutrients or in combination with other nutrients. Often certain soil conditions, such as high pH, cause a deficiency of micronutrients. Baicor® provides a product (COMBO) containing all micronutrients in chelated form to alleviate this problem. A complete fertilizer containing all nutrients (Gold Star®) is available for vegetables, flowers, shrubs, etc.

Fertilizers are formulated to increase blooming and fruit set (Uptake®); to use in starting plants in pots, hanging baskets, etc. (Nutra Gel® and Nutra Green®); to increase germination and seedling growth (Plant Starter® and NBE®); to improve soils (Soil Stimulator®), etc.



### What is a complex and how is it different from a chelate?

Complexes are not 100% chelated products and are not meant to be mixed with phosphorus in general. Our complexes are extremely effective due to using natural organic and amino acids and carbohydrates to help in greater translocation and uptake for the plant. The nutrients are generally higher in percentage and are less costly as well.

Some complexes (other competitors) that are not chelated 100% are claimed as chelates, and may not be effective when mixed with phosphate.

#### Can that small of an amount really help me?

When products are applied as a foliar the plants take up the nutrients through the cuticle and stomata in the leaves. This is very effective and efficient.

A foliar from 1- 4 quarts per acre is a common recommendation. Soil and tissue labs recommend these amounts depending on nutrients needed. Our products get to the growth source where development is affected.

### Is it expensive? What is the cost? Can I afford your product?

Prices vary among the products. Foliar fertilization is actually a very feasible way to fertilize. Most products only require 1 to 2 qts per acre.

Our products are priced not the highest and not the lowest, but our products are of the highest quality! They are specially designed for your plants needs! You cannot afford not to try our products; you and your plants will notice the difference.

#### When should I apply your product?

It does depend on the crop and stage of growth of the plant. There are windows of opportunity in providing foliars to assist growth, quality, increased yields etc. After knowing this our salesmen can assist you.

#### Is it really as good as you say?

All our products contain a series of selected natural organic compounds which chelate or complex nutrients and keep them in functional form until they are utilized by the plant.

Such natural products are obtained from plant and micro-organism sources.

We strive at Baicor® to provide the best product to help your plants and increase yields.

### Do you have specific products for roses, vegetables, vine crops, trees, and shrubs?

"Yes", We have products for these specific plants. Please contact us and we can help you find what will work best for your situation.

### How safe are Baicor® products to use on fruits and vegetables?

They are very safe. You can eat fruits and vegetables within 24 hours after applying product.

#### I want a lawn fertilizer that will make my lawn green and healthy, without having to mow it two times a week. Do you have a product like that?

"Yes", Gene's Booster® would work great. It is a 19-2-2 with 1% iron. This product gives your lawn the healthy green appearance you are looking for. Sometimes turf requires a little more iron; when this occurs Iron Combo Chelate® in combination with Gene's Booster® works well.

#### Are Baicor® Products Proven?

They have been used over 30 years by Home and Garden, Agriculture, Golf and Turf Growers. We have used them in our own laboratory, greenhouse, and field plots. In addition, independent growers use our products with complete satisfaction. Golf courses, flower gardens, vegetables gardens, and greenhouses use Baicor® Products throughout the world. Our nutrient products are manufactured using the finest of materials; foliar nutrients are in true solution and the proper form for effective uptake and use by the plant.

### I have a retail store, how do I get your products?

We would be happy to indicate the distributors serving your area.

### I am a wholesale greenhouse grower, how can I find out what products to use?

Please contact us and we will indicate our distributors in your area.

#### How do I use Baicor® Products?

Baicor® products can be used as a foliar, dripline, or added as a drench or banding around the plant. Instructions are printed on the label as to methods of application, time to be applied, rate and use for different plants. We have a product for every circumstance and type of plant, be it flower, vegetable, shrub, tree or turf. Call for specifics from our knowledgeable staff.

# History of BRANDT®

#### **About BRANDT:**

A leading agricultural company, BRANDT consists of three divisions—Specialty Formulations, Retail Agronomy and Dealer Support—serving agriculture, turf and lawn and garden customers around the globe. Founded in 1953 by Glen Brandt and his sister Evelyn Brandt Thomas to help Illinois farmers adopt new and profitable technologies, the company has experienced aggressive growth under the leadership of President and CEO Rick Brandt. BRANDT's focus is providing products and services that give customers the best opportunity for maximum return.

BRANDT owns and operates 23 ag retail locations in central Illinois, which covers nearly 1 million acres. The company's specialty formulations division manufactures and markets one of the largest portfolios of specialty input products. BRANDT is one of the largest manufacturers of specialty liquid nutrition and micronutrient formulations; as well as one of the largest suppliers of sustainable inputs.

In the turf market, BRANDT owns and manufactures several brands including: Grigg Brothers®, BRANDT® and BRANDT® iHammer®. Together, these brands offer one of the largest portfolios of turf nutrition and specialty products available today. The product assortment ranges from high performance foliar nutrition, to colorants, pond dyes, adjuvants, bio-pesticides and utility products.

In 2016, BRANDT purchased a majority interest in Baicor®. Baicor manufactures several highly respected turf product lines that are sold under private labels domestically and internationally. The company also manufactures specialty fertilizers in the ag and lawn and garden category. The Utah-based manufacturing and R&D is a strong addition to BRANDT's six other manufacturing facilities and Discovery and Innovation team. These additions will enhance the company's technical and manufacturing resources, and allow the company to better serve customers in the western US.

For more information, visit BRANDT at www.brandt.co





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