

Cutting Edge Solutions



Micro 6-0-0



Bloom 0-6-5



Grow 2-1-6



**Uncle John's Blend
0-0-2**



Plant Amp™



MAG-AMPIED™





Cutting Edge Solutions

Cutting Edge Solutions' three part hydroponic nutrients were developed in Northern California, where a wide range of water quality issues and diverse microclimates can make hydroponic growing difficult.

We have our own research green-houses that provide us with the ability to develop our specialty plant nutrients. After successful trials these nutrient formulas become **Cutting Edge Solutions'** products, and we offer them to the rest of the growing world.

As well as our own trials, the development of our products has been influenced in part by large-scale growers, hobbyists and Hydroponic store staff. Through the feedback received by these sources, we are able to adjust to the needs of our clients and produce outstanding results.

Our nutrients are designed to be easy to use, pH stable and effective for a variety of plants. We pride ourselves on providing high quality products, that we believe in, at competitive prices. We hope you enjoy the fruits of our labor, and more importantly the fruits of your own labor.

Product Mixing and Reference Chart

PLANT STAGE	MICRO	BLOOM	GROW
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DRAIN TO WASTE SYSTEMS

Using Coco Coir, Rock Wool, Hydro Rock, or 100% Soil

Cuttings Rooted	5 ml	5 ml	10 ml
Vegetative Mix	5 ml	5 ml	10 ml
Transition Mix	5 ml	10 ml	5 ml
Bloom Mix	5 ml	15 ml	0 ml
Optional Flush	2 ml	5 ml	0 ml

RECIRCULATING SYSTEMS

Using Coco Coir, Rock Wool, Hydro Rock, etc.

Cuttings Rooted	5 ml	5 ml	10 ml
Vegetative Mix	8 ml	5 ml	15 ml
Transition Mix	8 ml	15 ml	5 ml
Bloom Mix	8 ml	20 ml	0 ml
Optional Flush	4 ml	10 ml	0 ml

Measurements in milliliters per gallon



Plant Amp™



Cutting Edge Solutions

Cutting Edge Solutions' Plant Amp is a pure Calcium chelate, chelated utilizing low molecular weight organic acids. This chelation process provides improved calcium transport into the plant body, meaning the calcium is easily assimilated by plants and transferred into cell growth.

Calcium is an integral part of cell wall development, and the overall ability of a plant to grow to it's maximum potential. Calcium uptake by the plant's roots and leaves promotes an amplification of hormonal signals between cells. Increased communication of these signals between plant cells promotes vigorous growth, and increases cell wall strength and permeability. Using Plant Amp will provide your plants with the necessary Calcium to optimize growth, enhance bountiful blossoms in ornamental plants, and promote heavier fruits and veggies.

Product Mixing and Reference Chart

PLANT STAGE	PLANT AMP
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DRAIN TO WASTE SYSTEMS

Using Coco Coir, Rock Wool, Hydro Rock, or 100% Soil

Cuttings Rooted	10 ml
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Vegetative Mix	10 ml
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Transition Mix	10 ml
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Bloom Mix	10 ml
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Optional Flush	10 ml
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RECIRCULATING SYSTEMS

Using Coco Coir, Rock Wool, Hydro Rock, etc.

Cuttings Rooted	10 ml
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Vegetative Mix	10 ml
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Transition Mix	10 ml
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Bloom Mix	10 ml
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Optional Flush	10 ml
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Measurements in milliliters per gallon

NOTE Plant Amp™ contains Organic Acids which cause a temporary low pH reading. **Do Not Adjust pH up.** The pH will rise naturally as the plant uptakes the chelated calcium in one or two days.

Cutting Edge Solutions

PLANT STAGE	Light Hours	Duration	MICRO	BLOOM	GROW
MIXTURE			RECIRCULATING SYSTEMS		
Cuttings Rooted	18 Hours	Customer Preference	5 ml	5 ml	10 ml
Vegetative Mix	18 Hours	1-2 Weeks	8 ml	5 ml	15 ml
Transition Mix	12 Hours	1-2 Weeks	8 ml	15 ml	5 ml
Bloom Mix	12 Hours	4-8 Weeks	8 ml	20 ml	0 ml
Optional Flush	12 Hours	5-10 Days	4 ml	10 ml	0 ml

MIXTURE			DRAIN TO WASTE SYSTEMS		
Cuttings Rooted	18 Hours	Customer Preference	5 ml	5 ml	10 ml
Vegetative Mix	18 Hours	1-2 Weeks	5 ml	5 ml	10 ml
Transition Mix	12 Hours	1-2 Weeks	5 ml	10 ml	5 ml
Bloom Mix	12 Hours	4-8 Weeks	5 ml	15 ml	0 ml
Optional Flush	12 Hours	5-10 Days	2 ml	5 ml	0 ml

FOLIAR SPRAY MIXES	For Vegetative Cycle / Rooted Cuttings				
	N/A	N/A	N/A	N/A	2.5 ml
	For Cal-Mag Solution				
	N/A	N/A	N/A	N/A	2.5 ml
	For Low-Light Situations or Light Depravity				
	N/A	N/A	N/A	N/A	2.5 ml

NOTE Plant Amp™ contains Organic Acids which cause a temporary low pH reading. **Do Not**

Product Mixing Chart and Reference Chart

Measurements in Millileters Per Gallon

PLANT AMP	UNCLE JOHN'S	MAG AMPED	pH	EC	PPM
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Using Coco Coir, Rock Wool, Hydro Rock, etc.

10 ml	10 ml	2 ml	4.0 ~ 6.5	1 ~ 2.5	500 ~ 1250
10 ml	10 ml	2 ml	4.0 ~ 6.5	3 ~ 4	1200-2000
10 ml	10 ml	2 ml	4.0 ~ 6.5	1.7 ~ 3.5	850-1700
10 ml	10 ml	5 ml	4.0 ~ 6.5	2.5 ~ 3.2	1400 ~ 1600
10 ml	10 ml	0 ml	4.0 ~ 6.5	1.5 ~ 2.5	750 ~ 1250

Using Coco Coir, Rock Wool, Hydro Rock, or 100% Soil

10 ml	10 ml	2 ml	4.0 ~ 6.5	1 ~ 2.5	500 ~ 1250
10 ml	10 ml	2 ml	4.0 ~ 6.5	1 ~ 2.5	500 ~ 1250
10 ml	10 ml	2 ml	4.0 ~ 6.5	1.3 ~ 2.3	650 ~ 1150
10 ml	10 ml	5 ml	4.0 ~ 6.5	1.2 ~ 2.2	600 ~ 1100
10 ml	10 ml	0 ml	4.0 ~ 6.5	0.5 ~ 1.2	230 ~600

For Vegetative Cycle / Rooted Cuttings

10 ml	10 ml	0 ml	N/A	N/A	N/A
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For Cal-Mag Solution

10 ml	0 ml	2.5 ml	N/A	N/A	N/A
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For Low-Light Situations or Light Depravity

0 ml	0 ml	5 ml	N/A	N/A	N/A
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Adjust pH up. The pH will rise naturally as the plant uptakes the chelated calcium in one or two days.

Cutting Edge Solutions

Cutting Edge Solutions' Uncle John's Blend is a proprietary elixir developed originally in the hills of Humboldt County. Uncle John's Blend is formulated in small batches to ensure quality and freshness. Uncle John's Blend is developed to reduce stress and increase flower and fruit production.

When using a high phosphorus bloom formula, a plant's metabolism is boosted during flowering. Uncle John's Blend helps to alleviate deficiencies that can occur from stress as a result of increased metabolic function. Uncle John's Blend supplies potassium to plants delivered through a matrix of sugars (carbohydrates). The potassium acts as the primary electrolyte for energy, while the carbohydrates are precursors for complex aromatic esters and flavinoids. Enhanced production of flavinoids and aromatic compounds (esters) equate to more intense perfume in aromatic flowers, and richer flavors in fruits.

Product Mixing and Reference Chart

PLANT STAGE UNCLE JOHN'S

DRAIN TO WASTE SYSTEMS

Using Coco Coir, Rock Wool, Hydro Rock, or 100% Soil

Cuttings Rooted	10 ml
Vegetative Mix	10 ml
Transition Mix	10 ml
Bloom Mix	10 ml
Optional Flush	10 ml

RECIRCULATING SYSTEMS

Using Coco Coir, Rock Wool, Hydro Rock, etc.

Cuttings Rooted	10 ml
Vegetative Mix	10 ml
Transition Mix	10 ml
Bloom Mix	10 ml
Optional Flush	10 ml

Measurements in Milliliters Per Gallon



Cutting Edge Solutions

Cutting Edge Solutions' Mag Amped™ is a pure Magnesium chelate, which is easily assimilated by plants. Magnesium is the primary element involved in chlorophyll production. Chlorophyll essentially equates to the source of a plant's energy.

Mag Amped™ amplifies the overall chlorophyll production in plants. Extra Magnesium helps plants produce chlorophyll in lower light situations (both in intensity and duration). Using Mag Amped™ in foggy, filtered, or low intensity light, as well as short duration light cycles, helps to enhance a plant's chlorophyll and in turn, can boost the plant's energy level.

Product Mixing and Reference Chart

PLANT STAGE	MAG AMPED
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DRAIN TO WASTE SYSTEMS

Using Coco Coir, Rock Wool, Hydro Rock, or 100% Soil

Cuttings Rooted	2 ml
Vegetative Mix	2 ml
Transition Mix	2 ml
Bloom Mix	5 ml
Optional Flush	0 ml

RECIRCULATING SYSTEMS

Using Coco Coir, Rock Wool, Hydro Rock, etc.

Cuttings Rooted	2 ml
Vegetative Mix	2 ml
Transition Mix	2 ml
Bloom Mix	5 ml
Optional Flush	0 ml

Measurements in Milliliters Per Gallon



Micro 6-0-0



Bloom 0-6-5



Grow 2-1-6



Plant Amp



**Uncle John's Blend
0-0-2**



MAG-AMPED

Cutting Edge Solutions



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