

MegaGro Usage Instructions - Growing Grapes

MEGAGRO Gallon (128 oz) - Equivalent to 60 grams a.i. per gallon

MEGAGRO 8 oz Concentrate - Equivalent to 3.73 grams a.i. per 8 oz.

SPRAY INSTRUCTIONS FOR GRAPES

For all grapes, apply by ground sprayer. Apply as a dilute or concentrate spray in sufficient water to ensure thorough wetting. Use 100 to 500 gallons per acre as a dilute spray according to foliage density, or 30 to 80 gallons per acre as a concentrate spray, unless specified otherwise. High amounts of Gibberellic Acid may reduce fruitfulness (cluster counts and cluster size) the following year in some growing regions and for some cultivars. Additionally, berry skin color development, sugars accumulation and overall maturation may be delayed. Timing of subsequent sprays will be dictated by experience in the vineyard to be sprayed and temperatures occurring during the interim between sprays. Sprays made after 15 - 20 days from the first sizing spray will be less effective. Do not exceed maximum application rate. It is important to wet all berries thoroughly.

SEEDLESS GRAPES

THOMPSON SEEDLESS GRAPES

For cluster elongation (“Stretch”), looser cluster forms, and reduced thinning costs: Apply one to three applications of 8 to 16 grams a.i. per acre before bloom when flower clusters are 2 to 5 inches long.

For decreased berry set (“Thinning”), reduced hand - thinning costs, and hastened maturity: Apply one to four applications of 8 to 16 grams a.i. per acre per application during bloom. When the bloom period is extended, make sprays 1 to 7 days after the first application. Higher amounts or multiple applications may cause an excess of shot berries or over thinning, especially in young vines or vines with high vigor.

To help initiate the beginning of the berry growth period “bump spray”: Apply 8 to 20 grams a.i. per acre as a single application during the period between the last thinning and first sizing spray.

For larger berries (“Sizing”) and larger clusters when used in conjunction with established girdling and thinning practices: Apply one application of 32 to 120 grams a.i. per acre when average berry size is 3 to 5 millimeters in diameter. Make up to three more applications of 32 to 120 grams a.i. per acre per application.

THOMPSON SEEDLESS GRAPES FOR RAISINS

For cluster elongation (“Stretch”), looser cluster forms, and reduced thinning costs: Apply one to three applications of 8 to 16 grams a.i. per acre before bloom when flower clusters are 2 to 5 inches long.

For decreased berry set, (“Thinning”) with increased raisin quality, and hastened maturity: Apply one to four applications of 3 to 12 grams a.i. per acre per application during bloom. When the bloom period is extended, make sprays 1 to 7 days after the first application. Higher amounts or multiple applications may cause an excess of shot berries or over thinning, especially in young vines or vines with high vigor.

For larger berries (“Sizing”) and larger clusters when used in conjunction with established girdling and thinning practices: Apply one application of 4 to 20 grams a.i. per acre when average berry size is 3 to 5 millimeters in diameter. Make up to three more applications of 4 to 20 grams a.i. per acre per application.

BLACK CORINTH (ZANTE CURRANT) GRAPES

To increase berry size: Apply a single application of 1 to 12 grams a.i. per acre three to five days after full bloom, but before shatter begins.

FLAME SEEDLESS GRAPES

For cluster elongation (“Stretch”), looser cluster forms, and reduced thinning costs: Apply one to three applications of 8 to 16 grams a.i. per acre before bloom when flower clusters are 2 to 5 inches long.

For decreased berry set (“Thinning”), reduced hand - thinning costs, and hastened maturity: Apply one to four applications of 3 to 16 grams a.i. per acre per application during bloom. When the bloom period is extended, make sprays 1 to 7 days after the first application. Higher amounts or multiple applications may cause an excess of shot berries or over thinning, especially in young vines or vines with high vigor.

For larger berries (“Sizing”) and larger clusters when used in conjunction with established girdling and thinning practices: Apply one application of 20 to 120 grams a.i. per acre when average berry size is 6 to 8 millimeters in diameter. Make up to three more applications of 20 to 120 grams a.i. per acre per application.

PERLETTE GRAPES

For cluster elongation (“Stretch”), looser cluster forms, and reduced thinning costs: Apply one to three applications of 8 to 16 grams a.i. per acre before bloom when flower clusters are 2 to 5 inches long.

For larger berries (“Sizing”) and larger clusters when used in conjunction with established girdling and thinning practices: Apply one application of 32 to 120 grams a.i. per acre when average berry size is 4 to 5 millimeters in diameter. Make up to three more applications of 32 to 120 grams a.i. per acre per application.

OTHER SEEDLESS VARIETIES (AUTUMN ROYAL, BLACK EMERALD, CRIMSON SEEDLESS, PRINCESS, RUBY SEEDLESS)

For decreased berry set (“Thinning”), reduced hand - thinning costs, and hastened maturity: Apply one to two applications per acre per application during bloom according to the table below. When the bloom period is extended, make sprays 1 to 7 days after the first application. Higher amounts or multiple applications may cause an excess of shot berries or over thinning, especially in young vines or vines with high vigor. Consult a WAI representative or local specialist before thinning to unfamiliar cultivars. New cultivars are very responsive and may over - thin easily especially in temperatures exceeding 90°F.

For larger berries (“Sizing”) and larger clusters when used in conjunction with established girdling and thinning practices: Apply one application of 8 to 60 grams a.i. per acre when average berry size is 3 to 14 millimeters in diameter. Make up to three more applications of 8 to 60 grams a.i. per acre per application. Timing of subsequent sprays will be dictated by experience in the vineyard to be sprayed and temperatures occurring during the interim between sprays. Sprays made after 15 - 20 days from the first sizing spray will be less effective. High amounts of Gibberellic Acid may reduce fruitfulness (cluster counts) the following year in some growing regions and for some cultivars. Additionally, berry skin color development, sugars accumulation and overall maturation may be delayed. Consult a WAI representative or local specialist before sizing to unfamiliar cultivars.

SPRAY RATES FOR OTHER SEEDLESS VARIETIES

VARIETY	THINNING	SIZING
Autumn Royal	1-2	No Recommendation
Black Emerald	1-2	4 - 8
Crimson Seedless	0.5-1	4 - 8
Princess	0.5-1	4 - 8
Ruby Seedless	0.5-1	8 - 16

SEEDED GRAPES (EMPEROR GRAPES)

NOTE: High amounts of Gibberellic Acid may delay berry skin color development, sugars accumulation and overall maturation. Whole vine application may reduce fruitfulness (cluster counts and cluster size) the following year.

To increase berry size and reduce berry shrivel:

Whole vine spray – Apply a single application of 20 grams a.i. per acre when average berry diameter is 12 - 16 millimeters.

Direct spray to grape clusters or cluster dip - Prepare a spray solution of 40 to 50 ppm as a cluster dip or spray directly to clusters without spraying foliage or buds.

SEEDED GRAPES (RED GLOBE, CALMERIA, CHRISTMAS ROSE, ROGUE, QUEEN)

NOTE: High amounts of Gibberellic Acid may delay berry skin color development, sugars accumulation and overall maturation. Whole vine application may reduce fruitfulness (cluster counts and cluster size) the following year. Consult a WAI representative or local specialist before sizing to unfamiliar cultivars.

To increase berry size:

Apply a single application of 8 to 16 grams a.i. per acre when average berry diameter is 12 - 16 millimeters.

Direct spray to grape clusters or cluster dip - Prepare a spray solution of 40 to 50 ppm as a cluster dip or spray directly to clusters without spraying foliage or buds.

WINE GRAPES

NOTE: If growers have no experience with this product, by contacting a WAI representative or local agricultural specialist before application, the grower can avoid some possible yield reduction of seed in wine grape cultivars. Yield reduction may arise from an increase in shot berries in the year of application and a reduction in fruitfulness (cluster counts) in the first and second year following application. Do not apply this product less than three weeks before full bloom.

To increase cluster length, provide improved air circulation and light penetration within the cluster, and help to reduce incidence of bunch and sour rot: Apply a single application in 50 gallons of water according to the table below. Make applications when dominant shoot clusters arising from buds on count spurs have begun to elongate and show separation of the uppermost flower groups. This generally coincides with an average cluster length of 3 to 4 inches (1 to 5 inch overall cluster length).

CROP/CULTIVAR	RATE (grams a.i./acre)
Palomino Sauvignon Blanc Tinta Madeira	0.4 - 1
Aleatico Carignane Chardonnay Chenin Blanc French Colombard Pinot Noir Valdepenas	1 - 2
Barbera Petite Sirah Zinfandel	2 - 4
Green Hungarian	4 - 8
Grenache Alicante	8
Salvadore	8 - 16

CONVERSION TABLES

MEGAGRO Concentrate contains approximately .466 grams of active ingredient per fluid ounce of product.

Grams of active ingredient	Fluid ounces of MEGAGRO Concentrate
0.2	0.4
0.5	1.1
1.0	2.1
2.0	4.3
4.0	8.6
5.0	10.7
8.0	17.2
12.0	25.7
16.0	34.3
20.0	42.9
25.0	53.6
32.0	68.6
40.0	85.8
48.0	102.9
50.0	107.2
60.0	128.7

PPM Solutions – to create various ppm solutions add the specific amount of MEGAGRO in oz. to the remaining amount of water per the final solution volume.

ppm solution	MegaGro Per Pint	MegaGro Per Quart	MegaGro Per Gallon
1	0.01	0.02	0.08
5	0.05	0.1	0.4
10	0.1	0.2	0.8
25	0.25	0.5	2
50	0.5	1	4
100	1	2	8
250	2.5	5	20
500	5	10	40
800	8	16	64
1000	12.5	25	100
1600	Use Straight MEGAGRO	Use Straight MEGAGRO	Use Straight MEGAGRO