

CHRYSTAL

Chrysanthemum x morifolium



Chrystal represents the flagship double-flowering series ideal as a high-end option for consumers searching for a luxurious aesthetic. With low PGR requirements, excellent branching, and a rounded habit, Chrystal is manageable for the grower, yet magnificent for the consumer.



Chrystal Bumblebee



Chrystal Pink



Chrystal Bronze Bicolor

STATUS	CULTIVAR	CULTIVAR CODE	RESPONSE TIME (WEEKS)	VIGOR	FLOWER TYPE
Top Pick	Chrystal Blanche	65537	7	●●●○○	Double
	Chrystal Blush	65874	7.5	●●●●○	Double
Top Pick	Chrystal Bronze Bicolor	65688	7.5	●●●●○	Double
Top Pick	Chrystal Bumblebee	65876	7.5	●●●●○	Double
NEW	Chrystal Jasper	65251	7	●●●●○	Double
	Chrystal Lovely	65541	6.5	●●●○○	Double
	Chrystal Orange	65781	7.5	●●●●○	Double
	Chrystal Pink	65543	6	●●●○○	Double
Top Pick	Chrystal Purple	65875	7	●●●●○	Double
Top Pick	Chrystal Red	65545	7.5	●●●●○	Double
Top Pick	Chrystal Romance	65896	7	●●●●○	Double
	Chrystal Smiley	65654	7.5	●●●○○	Double
NEW	Chrystal Solar	65899	7	●●●●○	Double
	Chrystal White	65551	7	●●●○○	Double

●○○○○ *Compact* ●●○○○ *Medium-compact* ●●●○○ *Medium* ●●●●○ *Medium-vigorous* ●●●●● *Vigorous*

CHRYSTAL*Chrysanthemum x morifolium***STICKING**

Rooting Hormone?	Optional with 1,200-1,500 ppm Indole-3-butyric acid (IBA)
Direct Stick Instructions	Stick cuttings in a ring towards the outside of the pot at a slight outward-facing
Misting instructions	Keep leaves coated and turgid (without saturating the media) until callus forms
Rooting Humidity	100% from day 0-8 Reduce from 95% to 70% from day 9-14

CONTAINER SIZE**4"-4.5"(10-11cm)****6 in. (15 cm)****PLANTS PER POT****1-3****4-5****VEGETATIVE TIME (WEEKS)****4-5****4-5****FERTILITY**

Fertilizer Rate	Moderate: 200 ppm N with 17-5-17 or 20-10-20 to charge media once callus forms.
Long-Day EC Range	0.6-1.0 mS via SME
pH Range	5.8-6.2

TEMPERATUREAverage Soil Temp **68-70°F (20-21°C)**Average Air Temp **68-72°F (20-22°C)****IRRIGATION**Irrigation Frequency **Level 4: Keep media moderately moist at all times****LIGHT**Vegetative Photoperiodic **Long Day**Supplemental **To maintain vegetative growth: Night interruption from 10pm-2am using**Benefits From Shade? **Keep light levels below 4200 fc (45000 lux) until callus forms. Full sun conditions****PINCHING**

Pinch when roots reach the sides and bottom of the pot leaving at least 4-7 leaves. Usually about 16-25 days after stick.

POTENTIAL DISEASES*Botrytis, Pythium, Rhizoctonia*, powdery mildew**POTENTIAL PESTS**

Aphids, spider mites, thrips, mealy bugs

GROWTH REGULATION

- B-Nine (85% Daminozide) at 1250-2500 ppm: (7-10 day summer rotation) (10-15 day spring/rotation) (14-21 day winter rotation).
- Pot mums can be grown in a negative DIF environment with night temps at 68°F (20°C) and day temps at 64°F (18°C).

TIPS

- Place cuttings in cooler upon arrival at 46-50°F (8-10°C).

POT MUMS

FINISHING

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FERTILITY

Fertilizer Rate	100-125 ppm N with 17-5-17
Short Day EC Range	1.0-1.5 mS via SME
pH Range	5.7-6.2

TEMPERATURE

Day Temperature	67-72°F (19-22°C)
Night Temperature	62-65°F (17-18°C)

IRRIGATION

Irrigation Frequency	Level 3: Keep media moderately moist at all times
Humidity	Humidity should remain between 70-85%. Humidity above 95% increases the risk of disease and should be avoided.

LIGHT

Flowering Photoperiodic requirements	Short Day
Photoperiodic Instructions	Between 12.75-13.5 hours of darkness until flower color is visible.
Supplemental	Optional on cloudy/overcast days
Benefits From Shade?	No

BUD INSTRUCTIONS

Bud removal not required. However, the Chrystal series can be center budded or disbudded.

POTENTIAL DISEASES

Botrytis, Pythium, Rhizoctonia, powdery mildew

POTENTIAL PESTS

Aphids, spider mites, thrips, mealy bugs

GROWTH REGULATION

- B-Nine (85% Daminozide) at 1250-2500 ppm:
 - 7-10 day summer rotation
 - 10-15 day spring/autumn rotation
 - 14-21 day winter rotation).

TIPS

- Switching to clear water when plants are in 30% color will extend shelf life at retail and for the consumer.
- If you can read a newspaper under blackout, it's not dark enough. Streetlights, moonlight, etc should be taken into account to reduce the chance of short day interruption.
- Ensure plants are adequately spaced to promote a strong healthy crop with a rounded habit. Proper spacing accommodates plants touching slightly when full grown.
- Night temperatures above 73°F (23°C) will result in heat delay which will postpone the listed response time. Open blackcloth when complete darkness has fallen to vent stagnate hot air.