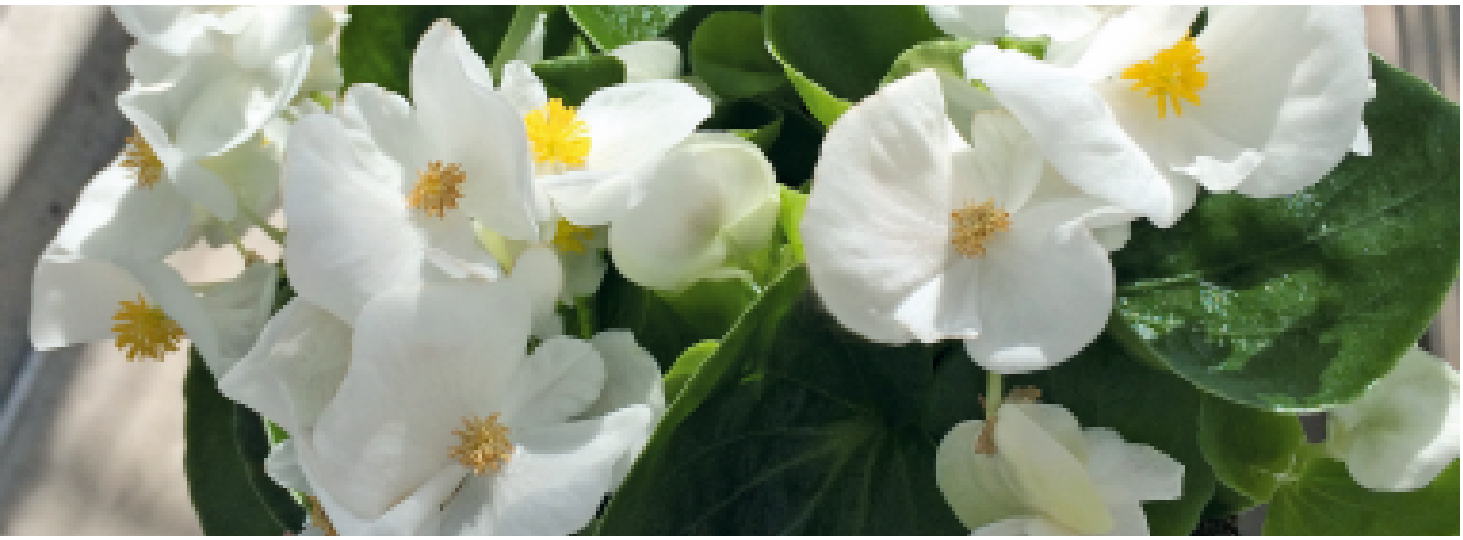
Begonia semperflorens F_1

Super Cool

White

Item no.: BS0404P



Your All-Around Begonia

- Uniform flowering window within the series
- Well-branched, extremely large flowers, very floriferous
- Habit between Sprint Plus and Super Olympia®
- Earliness close to Sprint
- Works in pots, packs and the landscape

Crop Time	Spring: 10 - 12 weeks
Height ⌀	11 " / 28 cm
Width ⌀	11 " / 28 cm
Exposure	Sun - Shade
Seed Form	Pelleted Seed
Product Use	Pots, Hanging Baskets, Mixed Containers, Landscape
Family, Origin	Begoniaceae, South and Central America
Minimum Germ. Rate	90 %

TECHNICAL GUIDE

Begonia semperflorens F_1 Super Cool

Flowering
Flowering Type: Day neutral plant, will flower regardless of day length.

Flowering Mechanism: Higher light intensity and warmer temperatures will promote earlier flowering. Supplemental lighting during germination will benefit but is not necessary.

Plug Culture
Germination: Optimum conditions for seedling development, beginning on the day of sowing until radicle emergence. Expect radicle emergence in 6-8 days.

Cover: No covering required. Light is required and will help giving a more uniform germination.

Sowing method: 1-2 seeds or pellets per plug.

Media: pH 5.5-5.8; EC 0.5-0.75. Raise to EC 1.25-1.5 from stage 3.

Temperature: Maintain 22-24 °C (72-76 °F) for the first 10 days. For irrigation use warm water above 18 °C (64 °F) only. Then lower the

temperature to 20–21 °C (68–70 °F) during night and day. When the roots reach the bottom of the cell, the temperature can be lowered to 20 °C (68 °F).

Moisture: Begin with a saturated (5) for the first 10 days and then, begin to dry the media back slightly to wet (4). This will aid in the seedlings rooting into the media. Alternate between a wet (4) and a moist (3). After 3 weeks, it is critical to begin a good wet to dry cycle to prevent algae growth and help with the uptake of nutrients. At this point you can alternate between a wet (4) and a medium (2). The media should dry back within a 24 hours period. Good ventilation and horizontal airflow will create such an environment.

Humidity: 95–100% until day 10; then reduce to 40–60 %. Provide proper ventilation and horizontal airflow to improve oxygen levels in the media.

Dehumidify: On day 11 dehumidify, moving from 100 % to 40–60 %. Provide proper ventilation and horizontal airflow to improve oxygen levels in the media.

Light: Light is required and will help giving a more uniform germination. If germinating in a chamber supply 100 ft. candles (1000–1,000 lx) to prevent seedling stretch. Always protect seedlings from direct sunlight when moving to stage 2 until they are well stablished. Once established, the light levels can be increased to 2,000–2,500 ft. candles (20,000–25,000 lx). After 3 weeks, the light levels can be raised to 3,000–3,500 ft. candles (30,000–35,000 lx).

Fertilizer: Maintain an EC < 1.0. Fertilized water should not exceed an EC of 0.5. Begin fertilizing early to improve seedling quality. Under high light conditions more ammonium-based fertilizers can be used (17-5-17 and 20-10-20) and under low light use a calcium-based fertilizer (14-4-14 or 14-2-14). Initial feeding should start at 50-100 ppm and gradually work up to 100–150 ppm.

Plug Bulking and Flower Initiation: Optimum conditions during the vegetative stage from cotyledon expansion to flower initiation. This stage is when the seedlings root to the edge of the plug and reach the 4-6 true leaf stage where flower initiation occurs.

Growth Regulators: No growth regulators should be necessary since growth can be controlled by temperature and moisture management. If seedlings are uneven, a very light application of B-Nine (daminozide) or Cycocel (chlormequat chloride) can be applied.

Fungicides: Scout for botrytis and phytophthora during the plug stage and apply specific fungicides per the recommended labeled rate.

Fertilizer: Moderate fertilization levels are required. Fertilize the crop weekly with 100-150 ppm nitrogen, using a complete balanced fertilizer. Avoid high ammonium and high nitrogen levels, because the foliage can grow very large. Avoid pH levels above 6.0, as this can cause iron deficiency. Watch for low calcium and magnesium levels since this can result in stunted plants with marginal leaf edge burn. Under high light conditions, use an ammonium-based fertilizer (17-5-17) and under low light use a calcium-based fertilizer (14-4-14).

Growth Regulators: With proper moisture and temperature management, there should not be a need for growth regulators. If needed, apply Cycocel (chlormequat chloride) as a spray at 250-300 ppm one to two weeks after transplant.

Fungicide: Apply fungicides during long periods of low light and high humidity.

Common Diseases: Botrytis.

Pests: Primarily aphids and thrips.

Post Harvest: Fertilize with potassium nitrate at 100 ppm 1–2 weeks prior to shipping.

Growing On
Media: pH 5.5-5.8; EC 1.2-1.5

Light: Provide 3,500-4,000 ft. candles (35,000-40,000 lx).

Temperature: 20-21 °C (68-70 °F) during nights, 18-19 °C (64-66 °F) during days until the roots reach the bottom of the container. Thereafter, temperatures may be lowered to 16-18 °C (60-64 °F) day and night. An ADT (average daily temperature) of 19 °C (66 °F) will give the fastest finished crop.

Moisture: Alternate between moisture levels wet (4) and medium (2). Let plants dry back before re-saturating to a wet (4). Extremely dry plants will have a grayish cast to the leaves. Avoid watering plants under high temperature and light when the leaf temperature is excessive. This can cause leaf burn.

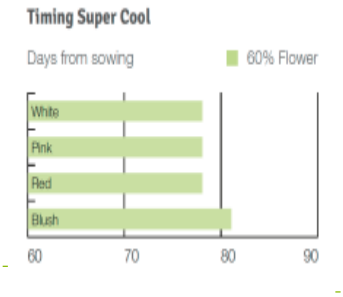
Humidity: 40-60 % humidity is ideal. Providing good ventilation and horizontal airflow will help lower the humidity and dry back the media, providing oxygen to the roots.

Plug & Finished Crop Time
Plug Time
288 tray: 6-7 weeks

Finished Time (from 288 tray)
Packs: 5-6 weeks
9-10 cm (3-4") pots: 5-6 weeks

Timing & Positioning Charts





Moisture Codes

Saturated (5)	Water is easily observed when finger is pressed on cell. Water moves freely from the top of the plug to the bottom.
Wet (4)	Media looks black and is not glistening. The media feels wet to the touch but there is very little water movement.
Moist (3)	Water is not easily visible. When finger is pressed on the cell there is very little movement from top to bottom.
Medium (2)	Media is not black, but now looks medium brown. There is no water movement when pressed with finger.
Dry (1)	Media has changed color to a very light brown and is dry to the touch.

All information in our technical guide is based on our own trials and would therefore be as guideline only. Detailed cultivation aspects vary depending on climate, location, time of year and environmental conditions. Benary expressly disclaims any responsibility for the content of such data/information and makes no representation or warranty for the cultivation of any products listed. It is recommended that growers conduct a trial of products under their own conditions.

COLORS OF THE SERIES

Begonia semperflorens F_1 Super Cool



White
BS0404P



Red
BS0403P



Pink
BS0402P



Blush
BS0401P



Mix (excl. Blush)
BS0499P