CULTURAL INSTRUCTIONS

SUNFLOR®
Sunflor® Dianthus pot carnation

**General**
Like the standard and spray carnation, the pot carnation belongs to the genus Dianthus of the family Caryophyllaceae. Under normal growing conditions, the Sunflor® pot carnation remains sufficiently compact. Treatment with growth retarders is therefore unnecessary. Even so, we sometimes find growth retarders being sprayed in practice. The result is then a more compact plant. The pot carnation resists temperatures from minus 5º to minus 10ºC. and so offers the grower and consumer a wide range of potential uses.

**Odessa® garden types**
This fragrant border pot carnation is especially suitable for outdoor cultivation. As compared with the other Sunflor® pot carnations, the Odessa® serie has tall growing habits and flowers from early Spring until late Fall.

**Compost and pot sizes**
Pot size:  9 – 17 cm (max)
- 9 – 11 cm diameter - 1 pinch
- More than 11 cm - double pinch (or even more)

Please be aware that the assortment is depending on climate conditions and flowering time and that the varieties chosen are in accordance with the pot size used.

Odessa garden types are suitable for 1 liter pots or > 12 cm pots.

An important criterion for the quality of the compost is the air/water ratio. A coarse soil, possibly mixed with 15% perlite, gives the best results. The optimum pH of the soil is between 5.5 and 6.5. Important fertilizers must be added in slow release form.

The following pattern may be adopted for unfertilized compost:

Additions per m³ (85% soil + 15% perlite):
- 5 kg. Dolokal
- 1,25 kg. P.G. mix
- 200 gr. Triple superphosphate
- 150 gr. Sulfate of Magnesium
- 10 gr. Libro-mix

It is certainly worthwhile consulting your compost supplier regarding the above.

**Feeding and watering**
Fertilizer is added during growth in the form of a soluble composite which includes magnesium (e.g. 15-3-15-5). Initial fertilization with nitrate of lime and 10-52-10 is recommended for a smooth start.

Have soil samples taken regularly to check the feeding conditions!
Limit maximum feed concentration to 2.5 E.C.

The pot carnation needs normal water. However, if the crop gets too much water in spring, pot carnations
will grow too tall. If water is added, make sure that the crop dries as quickly as possible. Watering should preferably take place in the morning. Overhead watering during cultivation is no problem provided clean water is being used. Nevertheless be careful with open flowers and see to it that the foliage dries quickly. When growing cold during the winter, make sure that the plants are stay on the dry side to prevent root and soil problems.

**Further cultural instructions**

The use of a watering mat or soil sheet helps to distribute the water better and restricts rooting through.

Plants need pinching as soon as the main bud appears (after approx. 4-6 weeks). This is necessary to ensure good branching and growth. When pinching, please make sure that it will be a hard/deep pinch.

Spacing out.
At the start of the season the pots can be placed next to each other. The density is then 120 plants per net m² (9 cm pot). The space is widened only once, when the plants “touch”. The plant density then varies from about 75 to 85 plants per net m² (9 cm pot). The growing temperature has a particular influence on growing speed. The minimum night temperature in winter is 5 - 8°C. The day temperature in spring should be increased between 10°C -15°C depending on the intensity of the light.

Adding CO₂ improves quality. The average harvesting date will then also be moved slightly forward. The optimum CO₂ content is approx. 700 - 1,000 ppm.

In case of artificial lightning the crop time will be shorter. It’s recommended to stay with a temperature between 12 and 14°C when lights are on.

**Growth retarding**

Depending on the growing conditions (e.g.:watering) experience has shown that it may be necessary to use a growth retarder now and then at the end of the culture, especially if the difference between day and night temperature is high. Wetter growing conditions also need a growth retarder. Most applied and most effective is Bonsi. Start with 0,2-0,3% and increase the dose depending on the results.

**Crop duration**

The duration of growth depends on the intensity of the light (season) and the cropping measures applied. The schedule below refers to the range of varieties offered by HilverdaKooij B.V. The duration of the crop depends on the prevailing temperatures and consequently may go on for a longer or shorter period of time.

**Control**

*Animal parasites:*
- Aphids
- Thrips
- Red Spider Mites

*Fungus parasites:*
- alternaria

**Sunflor labels**

We have developed a special Sunflor® label. This label contains as much information as possible, such as a colour picture of the variety, showing its form and way of flowering as well as some growing instructions for the customer.
We hope this short cultivation guide has contributed in a small way to the success of your Sunflor® production. Note that all information given is based on trial plantings conducted in the Netherlands. Although this information has been compiled with the greatest care, it does not constitute any form of guarantee: it is intended solely as a general guideline.

For more detailed information, please visit our website: www.hilverdakooij.nl
Or you can of course contact one of our sales representatives.

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