



code: 1390.CAR

1. Variety name : CARTHAMUS tinctorius Qis® Grenade Series

2. Description :

A special selection with round thornless leaves. Ideal for in- and outdoor cutflower use. The round flower buttons with the orange-yellow tuft of rag-florets of Orange Grenade are well known. Yellow and White Grenade have been introduced later. The soft creamy-white colour of the latter fits in almost every flower arrangement and is suitable for dying. The Grenade Series is excellent - also when harvested young as green buttons - to use fresh and dried.

For professional cutflower use, the Grenade Orange is offered as TunedSeeds for uniform germination and coated for healthy emergence. As a special service, we offer Grenade Orange also as fine seeds for thinner stems; a special use for high density growing.

3. General :

- a. colors : cream, orange, yellow and formula mixture
- b. height : 80-100 cm
- c. life cycle : annual
- d. weight of 1000 seeds : 28 gr
- e. time sowing/flowering : 10-14 weeks
- f. family : Compositae
- g. hardiness zone :

4. Sowing instructions :

- a. method : directseeding is recommended. Please note that, when sown in plugs, the seedlings are ready for delivery 5-7 days after sowing, as Carthamus forms a taproot.
- b. time : April-late June: outdoors;
January-July: indoors in heated greenhouse. From March onwards in coldhouse.
- c. temperature : 12-15°C
Germination becomes erratic at high temperatures. Seed can then best be soaked for 10 hours prior to sowing. Keep soil humid until the seed has all germinated.
- d. germination time : 10-14 days
- e. seed quantity or plants per m² : 1 gr per running meter, 50-80 sds/m²

see next page

5. Growing on :
- a. distance between rows and/or plants : 30 cm between rows, 6 cm between plants
 - b. soil : any well-drained soil with normal fertilisation and good Mn-level. A too fertile soil will give much vegetative growth and less flower production.
 - c. irrigation : overhead irrigation until flowering
 - d. optimum temperature : 10-20°C
 - e. diseases/pests : aphids, Botrytis, Colletotrichum carthamii. A preventive fungicide treatment is advised.
 - f. fertilization : regular requirement
6. General advice :
- a. cutting period : mid July-September
 - b. cutting stage : when the flowers start to open
 - c. general : netting is advisable

Carthamus

Yellowing on leaf is caused by both Magnesium and manganese deficiency.
a liquid feed with above minerals is beneficial

Quantity per Ha standard seed sown with standard sowing machine: approx. 30 kg per Ha
Graded (+ filmcoated) seed sown with precision sower: 15-20 kg per Ha
Calculations for larger surfaces and sales are done in seeds, not in kgs

This information is based on West European conditions and is given for general guidance only. No guarantee is given for the result of the crop, nor is liability accepted for the consequences of applying above indications.