

## Guidelines for use of the Cordenka® Growth 250 AC

Twine for the production of tomatoes with a fruit weight of about 40-90 g

### Product description

1. Cordenka® Growth 250 AC is made of rayon. Rayon is a cellulose filament material made from wood pulp and based on sustainable forestry.
2. Cordenka® Growth 250 AC is biodegradable and can be chopped and composted together with the harvested plant stems at the end of the growing season.
3. With the use of Cordenka® Growth, the entry of microplastics into the environment can be eliminated through twines during tomato cultivation.

### Approved use - testing

1. Cordenka® Growth has been developed for growing tomatoes in highly productive glass greenhouses and is approved for soilless cultivation on substrate under controlled temperature, humidity and crop protection conditions.
2. Cordenka® Growth 250 AC has an average breaking strength of approx. 25 kg ex works and can thus support tomato plants with a fruit weight of up to 90 g over one growing season. For tomato cultivation, we recommend the use of twine wound on steel wire hooks.
3. When Cordenka® Growth is used in conditions that may encourage the spread of fungal organisms, or other cellulose attacking organisms, especially those growing tomatoes in soil, or organic farming conditions, the strength of Cordenka® Growth cords may decrease to the point where they break.
4. Our application guideline for approved use is based on our current state of knowledge and does not constitute an application guarantee for our product. Due to the range of possible different application conditions, the user must test the suitability of the material for his/her specific application on his/her own responsibility under the cultivation conditions on site. Cordenka excludes any liability in this respect.

### Acclimatization

We recommend attaching the hooks with the Cordenka® Growth cord to the crop wire about 24 hours before tying the cord to the plant.

- The free-fall area of the cord should be dropped in the course of this step.
- This allows the cord to acclimatize to the greenhouse conditions, especially to the prevailing humidity in the greenhouse.
- The free-hanging cord will usually shrink by a few centimetres during this time due to moisture absorption.

### General influence of moisture

With increasing moisture, the tensile strength decreases and the cord shrinks slightly.

- Normal greenhouse climate changes are not a problem due to the strength reserves of the cord.
- However, if the cord becomes really wet, e.g. due to irrigation, wetting with spray liquid, dripping condensation water, or similar, it will continue to shrink to a certain extent as described above.
- This must be taken into account when tying knots between the cord and the plant.

### Connection of cord and plant

- Option 1: Initial connection of Cordenka® Growth cord and plant using a clip:
  - We recommend the use of clips made from compostable molded materials.
- Option 2: Initial connection of Cordenka® Growth cord and plant using a knot:
  - If you tie the cord to the plant stems, we recommend fastening the plant by means of fixed loops (bowline knots).



Image credits: [Bowline.svg](#) by Lucasbosch licensed under CC BY 3.0

See also: [Video PALSTEK](#) by Palstek



- Bowline knots are easy and quick to tie with a little practice, see YouTube link.
- Tie the bowline knots at the base of young tomato plants with enough slack.
- To take into account the thickness growth of the stems of the young tomato plants as well as the wet-shrinkage tendency of the cord when in contact with water, we recommend a diameter of the bowline knot loop of 3-4 cm for common tomato varieties.

### Cultivation work

- During plant growth, we recommend tying in new growth via winding with the Cordenka® Growth cord (1-2 turns per week).
- Alternatively, other compostable clips can be used to tie in new growth.

**WARNING:** Lateral forces, e.g. by contact with sharp edges, damage the cord and must be avoided. The cord is correspondingly sensitive when defoliating the plants with the knife and when harvesting the tomatoes with the scissor. Careful workmanship, avoiding contact between the knife or the scissor and the cord, is necessary here.

# CORDENKA

**Cordenka liability**

Cordenka guarantees a supply of high quality products according to the specification of Cordenka® Growth 250 AC.

In the event of a deviation of the product from the specified quality, Cordenka shall be liable for rectification, rescission or reduction at Cordenka's discretion. Any further liability is excluded.

Successful use of Cordenka Growth cord in tomato cultivation is the sole responsibility of the user and is subject to proper application in accordance with the above instructions. Cordenka accepts no liability for damage resulting from a lack of suitability for or failure of the cord in the use intended by the user in the individual case. In particular, Cordenka shall not be liable for consequential damages such as loss of production or loss of profit or interest.

# CORDENKA