

# bioagri

## CEDRESS

**Cedress is a seed treatment product against fungal pathogens in pea and carrot. All other use is unauthorized. Cedress can be used in organic farming. For professional treatment at closed industrial facility. All other use is prohibited unless specifically permitted.**

- ◆ EUH401: To avoid risks to human health and the environment, comply with the instructions for use.
- ◆ SB012: Micro-organisms may have the potential to provoke sensitizing reactions.
- ◆ P284: Wear respiratory protection.
- ◆ P280: Wear protective gloves.
- ◆ P302+352 In case of skin contact wash affected skin areas thoroughly with soap and water.

<b>Fungicide:</b>	Reg. nr: 4935
<b>Content:</b>	Flowable suspension for seed treatment (FS). 1000 L.
<b>Aktive ingredient:</b>	<i>Pseudomonas chlororaphis</i> , MA 342. 20 weight-%.
<b>Batch nr:</b>	See separate marking.
<b>Use before:</b>	See separate marking.
<b>Empty container:</b>	Dispose of this material and its container to hazardous or special waste collection point. Empty 1000 l packages shall be returned.
<b>Storage:</b>	+4°C to +8°C.

Lantmännen BioAgri AB  
Fågelbacksvägen 3  
SE-756 51 Uppsala  
SWEDEN  
Phone: + 46 18 67 49 00  
[www.bioagri.se](http://www.bioagri.se)

## 1. Product information

<b>Preparation:</b>	Fungicide, seed treatment product
<b>Active ingredient:</b>	<i>Pseudomonas chlororaphis</i> MA 342. 20% w/w
<b>Formulation:</b>	Flowable suspension for seed treatment (FS).
<b>Packages:</b>	1000 L
<b>Storage:</b>	+4°C to +8°C

Pathogen	Efficacy
<i>Ascochyta pisi</i>	Reduce infection of <i>Ascochyta pisi</i>
<i>Acrothecium carotae</i>	Reduce infection of <i>Acrothecium carotae</i> .

## 2. Conditions for use

### Marking of packages with treated seeds:

#### Seeds treated with CERALL reg nr 4935

Active ingredient: *Pseudomonas chlororaphis* MA 342. 20 weight-%.

Dispose of this material and its container to hazardous or special waste collection point.

Empty packages shall be returned. Treated seeds shall not be used as food or feed.

- ◆ EUH401: To avoid risks to human health and the environment, comply with the instructions for use.
- ◆ SB012: Micro-organisms may have the potential to provoke sensitizing reactions.
- ◆ P284 Wear respiratory protection.
- ◆ P280: Wear protective gloves.
- ◆ P302+352 In case of skin contact wash affected skin areas thoroughly with soap and water

## 3. Restrictions

Cedress is a seed treatment product against fungal pathogens in pea and carrot. For professional treatment at closed industrial facility. All other use is prohibited unless specifically permitted.

Treated seeds shall not be used as food or feed.

## 4. Instructions for use

### ***Mode of action***

Cedress is a biological seed treatment product. The active ingredient *Pseudomonas chlororaphis* compete with the plant pathogens for space and nutrients on the seeds and induce a resistance reaction in the plant. The bacteria also produce small amounts of antifungal substances. The bacterial cells are entering a resting stage on the seeds after treatment and are activated when seed germinates. Treated seeds can be stored with maintained effect against diseases for one year.

### ***Resistance***

As the mode of action is based on several mechanisms the risk for resistance is very low. No special actions have to be taken into consideration.

### ***Optimal treatment conditions***

Seed treatment shall be done in equipment that allows an even distribution of the product on the seed surface. The seeds shall be of good quality with an even size distribution and free from other materials.

### ***Doses***

**Crops:** pea  
**Dose:** 1 l/100 kg seed (= 10 L/ ton)

**Crops:** carrot  
**Dose:** 4 l/100 kg seed (= 40 L/ ton)

### ***Working instructions***

Cedress can be applied with common seed treatment machines designed for continuous wet and batch treaters designed for liquids. A list of machines suitable for Cedress could be provided by Lantmännen BioAgri on request.

The seed treatment machine should be carefully cleaned by rinsing with hot water and detergent, flushed with hot water and calibrated before the seed-treatment takes place. Cedress can be used in temperatures as low as +1 °C.

In order to keep the product free from contaminants, do not put dirty things into the package or let the package stay open longer than necessary.

### ***Cleaning of the seed-dressing machinery***

The machine should be flushed with hot water and detergent. The waste water needs no special precautions. Waste water that contains residues from other pesticides than Cedress should be handled as stated on the actual pesticides safety data sheet.

### ***Personal protection equipment***

Wear respiratory protection.  
Wear protective gloves.

### ***Waste and empty packages***

Containers and waste product should be treated in accordance to local regulations. Empty Combo Aseptic Boxes (1000 L only) could be returned to the producer.

### ***Storage***

Cedress is a fresh produce. The product can be stored for 8 weeks after delivery if stored in the original package frost free and no warmer than +8 °C. At room temperature (max 18 °C), unbroken original packaging can be stored for a maximum of 1 week. The use-before-date is only valid for packages with unbroken seals. Storage of partially emptied container shall be avoided. In order to keep the product free from contaminants, equipment for mixing or pumping should be sterilized with ethanol before if it is dipped into the product.

Treated seeds should generally not be stored for periods longer than 1 year before use when storage conditions are optimal. Cedress is a water based product; treatment with the recommended dose, 1 litre/100 kg, will raise the moisture content of the treated seeds up to 1 % (calculated value).

### ***Mixing with other seed treatment products***

Contact Lantmännen BioAgri AB for information.

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SWEDEN  
Telephone: 018 67 49 00  
[www.bioagri.se](http://www.bioagri.se)  
[info@bioagri.se](mailto:info@bioagri.se)

