



#### CHARACTERISTICS:

**CERALL** is a bio-fungicide based on *Pseudomonas chlororaphis*, strain MA 342, a gram negative bacterium that lives in the soil. Strain MA 342 is the result of a multiannual research: it has demonstrated a high effectiveness against some important diseases that affect cereals, such as helminthosporium disease (*Drechslera graminiae*, *teres*, *avenae*, etc.), stinking smut of wheat (*Tilletia caries*), loose smut and covered smut (*Ustilago avenae* and *Ustilago hordeii*), *Septoria nodorum*, *Bipolaris sorokiniana*, etc.

**CERALL** should be used exclusively for the industrial seed treatment. Once on the surface of the seed, *Pseudomonas chlororaphis* competes with pathogens for attack-areas and for nutrients, preventing their development. Moreover, it strengthens the plant, inducing resistance against pathogens and producing small doses of toxins. The bacterium remains dormant on seed until germination; then it increases in number and keeps a good efficacy until 5<sup>th</sup> leaf stage.

The use of **CERALL** is allowed in organic farming.

#### MODE AND FIELDS OF APPLICATION:

Applications should be carried out only with closed plant systems located in factories specialized for industrial seed treatment (for example: slurry), directly spraying the seed with the appropriate rate of product (no dilution with water is required).

#### RATES:

**CERALL** should be applied with the following rates:

Cereals (common and durum wheat, barley): 500-750 ml/100 kg of seed. The highest rate should be used on very infected batches.

#### COMPATIBILITY:

The product should be used alone.

#### STORAGE:

**CERALL** keeps its effectiveness for at least 3-4 months, if stored in its original packaging at 4-8°C. If stored at room temperature (20°C), the product should be used within 3 weeks. On seed treated and stored at room temperature, its efficacy lasts more than one year.

**CERALL** does not require special precautions in handling, because it does not contain active substances of synthetic origin.

Treated seed that are not used may be intended for feeding livestock.

COMPOSITION	FORMULATION	CLASSIFICATION	PRE-HARVEST INTERVAL	PACKAGING
Pseudomonas chlororaphis 8,7 g/lt Strain MA 342 Co-formulants: q.s. to g 100 Authorisation of Ministry of Health: n° 12678 dated 24/05/2005	Ready-to-use emulsion	Caution: handle with caution	Not applicable	200 lt tank 1000 lt tank

Before using the product carefully read all the instructions reported on the packaging label.