





#### Contains beneficial bacteria

### To increase the vitality of the plant and strengthen its resistance to abiotic stress factors

**Pentacil**® is a water dispersible plant vitalizer which increases vitality and strengthens the plant's immune system. The product contains five highly potent *Bacillus* species that naturally strengthen the plants: *Bacillus amyloliquefaciens*, *B. licheniformis*, *B. pumilus*, *B. simplex and B. subtilis*. **Pentacil**® is suitable for soil and foliar applications.

Bacillus spores are more resistant to adverse environmental conditions than the spores (conidia) of *Trichoderma* fungi. This is especially true for the conditions on the leaf surface where they are exposed to dryness and UV radiation. Therefore, **Pentacil®** is a useful supplement to *Trichoderma* products, such as **Bactiva®**, especially when application is difficult and when the microorganisms encounter challenging living conditions.

Benefits:	Increases	Reduces
	Plant's vitality and resistance to abiotic stress factors • Yield and production • Shelf life	Plant loss • Use of chemical fertilizers and fungicides

## Compatibility:

**Pentacil®** is compatible with fungicides and fertilizers. Avoid the use of biocides such as hydrogen peroxide and chlorine during use. According to the current state of knowledge **Pentacil®** is considered to be largely compatible with copper concentrations commonly used in plant protection, as these are generally compatible with Gram-positive bacteria (*Bacillus*).

If you have any questions about the compatibility with biocides, please contact our technical service.

Pentacil® is kind to beneficial organisms and not harmful to bees.

First mix the product with a small quantity of water, then dilute until the desired volume is achieved. This product is suitable for soil and foliar applications.

Crops that are grown on soil: 0.5-2kg/ha

Crops that are grown on substrate: 0.25-1kg/ha

### Application:

**Foliar applications:** The product should be mixed with water at 0.05 to 0.1 per cent and applied to the plant surface with a spray hose as evenly and completely as possible. (A 0.05-0.1 percent ratio corresponds to 0.5-1kg of product for 1000L of water or 50-100g for 100L of water). Add sufficient water to ensure a homogeneous application to the entire leaf surface, but avoid excess amounts that are lost to the plants by dripping from the leaves. Optionally, a wetting agent may be added to the mixture to increase the spread on the leaf surface. Note that crops with large leaf surface areas require larger amounts of product for a complete coverage.

Please consult our technical service for the exact application rate regarding the aim of the treatment, the crop and production process, as well as application intervals and the selection of a suitable wetting agent.

# Storage:

Store product in a cool, dry place. Avoid high temperatures and direct sunlight. Consume content quickly after opening. The product has a shelf life of 36 months.

### Ingredients:

Five bacterial species of the genus <i>Bacillus</i> :  B. amyloliquefaciens, B. licheniformis, B. pumilus, B. simplex, B. subtilis	3,000,000,000 CFU/g (3x10 <sup>9</sup> CFU/g) CFU = Colony Forming Units	
Sea kelp extract	Ascophyllum nodosum	



listed by FiBL as an input for organic agriculture in Germany approved for organic farming according to EC Organic Implementation Regulation 889/2008 Art. 3 (4)