

# POLYVERSUM

Before using product carefully read the instructions for use.

**Product trade name:** Polyversum

**Product type:** Microbial fungicidal plant protection product in Wettable powder form (WP)

**User categories:** Professional user

**Active substance:** *Pythium oligandrum* M1, 1 x 10<sup>6</sup> oospores/ g

**Manufacturer and holder of the authorisation:** Biopreparáty spol. s.r.o, Tylišovská 772/1, 160 00 Praha 6

**Authorisation number:** 4556-0

**Date of manufacture/ No. of batch:** shown on the sticker

**Expiry date:** 2 years from production date; storage temperature +5 ° C to + 25°C

**The quantity of product in the container:** 50g, 100g, 250g, 500g, 750g and 1kg in PET/AL/PE bags in cardboard box and 15 kg PET/Al/PE bag.

**Mode of action:** mycoparasitism, induction of resistance, growth stimulation.

**Instructions for use (spraying):**

Crop	Pest	Dosage, miscibility	Protection period	Interval/ max Nr of applications	Remarks
<b>Oil-seed rape</b>	Blackleg Sclerotinia stem rot	0.1kg/ha in 300-400 l water/ha	AT	14 days/ 3x	1) Two applications against blackleg. The first one in stage BBCH 12-19 in autumn and the second one in spring in stage BBCH 30- 40. Or the first one in stage BBCH 30-40 and the second one in the stage BBCH 40-65. 2) Two or three applications against Sclerotinia stem rot. The first one in stage BBCH 12-19 in autumn, second one in the stage BBCH 30-40 and third one in the stage BBCH 40-65. Or first in stage BBCH 30- 40 and second one in the stage BBCH 40-65.
<b>Wheat</b>	Fusarium head blight	0.1kg/ha 300-400 l water/ha	AT	14 days/ 3x	2-3 applications: in autumn at BBCH 13-15, in spring in stage BBCH 25-37 and to ears at BBCH 55-65
<b>Spring barley</b>	Fusarium head blight	0.1kg/ha 300-400 l water/ha	AT	14 days/ 3x	2 applications: in spring in stage BBCH 25-37 and to ears at BBCH 55-65

*The preparation has a side effect on Alternaria leaf spot and grey mould of oil-seed rape, while stimulating yield.*

*AT - the protection period is given by the interval between the final application (last application) and the harvest).*

**Minor uses:**

Crop	Pest	Dosage, miscibility	Protection period	Application method	Remarks
<b>Sugar beet, fodder beet</b>	Damping-off	5 g/kg seeds	AT	seed dressing	dry sowing pickling
<b>Potato</b>	Rizoctonia stem canker	0,25-0,5 kg/t tubers	AT	dry wrapping	
<b>Potato</b>	Rizoctonia stem canker	0,25-0,5 kg/t tubers 2-10 l/t tubers	AT	Tuber spraying	
<b>Potato</b>	Late blight – primry infection	0,25-0,5 kg/t tubers	AT	dry wrapping	In organic farming systems

<b>Potato</b>	Late blight – primry infection	0,25-0,5 kg/t tubers 2-10 l/t tubers	AT	Tuber spraying	In organic farming systems
<b>Potato</b>	Late blight	100 – 200 g/ha 300-800 l/ha	AT	sprayingk	Preventive since BBCH 14, In organic farming systems
<b>Pea</b>	Fungal diseases	0.5 -1kg/t seeds	AT	seed dressing	dry wrapping
<b>Pea</b>	Ascochyta leaf and pod spot	100 g/ha 300-400 l/ha	AT	spraying	2 applications in interval 7-10 days in stage BBCH 65-79
<b>Soya, lupine</b>	Fungal diseases	0.5-1 kg/t	AT	seed dressing	Dry or wet treatment
<b>Soya, lupine</b>	Sclerotinia stem rot, Ascochyta leaf and pod spot	100 g/ha 300-400 l water /ha	AT	Spraying	2 applications in interval 7-30 days
<b>Poppy</b>	Downy mildew, Leaf blight	0.1 kg/ha 200-400 l water /ha	0	Spraying	1 <sup>st</sup> and 2 <sup>nd</sup> appl.in stage BBCH 12-19, the 3 <sup>rd</sup> one in 51, int 14 days
<b>Strawberry</b>	Grey mould Phytophthora root and crown rot	0,1kg/ha 300-1000 l water /ha	0	Spraying, watering	Application right before flowering in interval 5-7 days, number of appl. unlimited
<b>Strawberry</b>	Leather rot, Phytophthora root and crown rot	0.05 %	0	Dipping of young plants before planting, strip watering after planting	1 application
<b>Hop</b>	Downy mildew	0.25 kg/ha 700-2000 l water /ha	0	Fogging Spraying	Treatment since start of sprouting., number of appl.unlimited in intervals 5-7 days as needed
<b>Hop</b>	Fungal rots of seedlings	0.05 %	0	Dipping of young plants before planting, watering after planting	Dipping – 1 appl., Watering - number of appl.unlimited
<b>Grapevine</b>	Fungal diseases of seedlings	0.05 %	0	Dipping of young plants before planting, watering after planting	Dipping – 1 appl., Watering - number of appl.unlimited
<b>Grapevine</b>	Grey mould, Downy mildew	0,25 kg/ha 300-1000 l/ha	AT	Spraying	Treatment since start of sprouting., number of appl.unlimited in intervals 5-7 days, in organic farming systems
<b>Mustard</b>	Sclerotinia stem rot, Grey mould, Alternaria leaf spot	0.1 kg /ha 200-600 l/ha	0	Spraying	Treatment since 1 <sup>st</sup> pair of right leaves, number of appl.unlimited in intervals 5-7 days as needed
<b>Sunflower</b>	<i>Sclerotinia sclerotiorum</i> , <i>Botrytis cinerea</i> , <i>Alternaria</i> spp.	0,1kg/ha 300-1000 l water /ha	0	Spraying	number of appl. unlimited; (interval 5 – 7 days)
<b>Cucumber</b>	Fungal diseases	5g/kg seeds	0	Seed dressing	Dry treatment
<b>Cucumber</b>	Fungal diseases	0.05% (5 ml/plant)	0	Watering	
<b>Cucumber</b>	Downy mildew	0.1 kg/ha 300-1000 l water/ha	0	Spraying	Preventive from flowering beginning, Nr of applications unlimited
<b>Pepper</b>	Fungal diseases	5 g/kg seeds	AT	Seed dressing	
<b>Pepper</b>	Fungal diseases	0.05 %	AT	Dipping, watering of young plants before planting	

<b>Pepper</b>	Fungal diseases	0.1-0.2 kg/ha 300-800 l water /ha	AT	Spraying, Irrigation	Dose according to anticipated infestation
<b>Tomato</b>	Fungal diseases	5 g/kg seeds	AT	Seed dressing	
<b>Tomato</b>	Fungal diseases	0.05 %	AT	Dipping of roots before planting	
<b>Tomato</b>	Fungal diseases	0.2 kg/ha 300- 800 l water /ha	AT	Spraying, Watering	Spraying during emergence only
<b>Vegetables</b>	Fungal diseases	5 g/kg seeds	AT	Seed dressing	
<b>Vegetables</b>	Fungal diseases	0.05 %	AT	Dipping of roots before planting	
<b>Brassica vegetables</b>	Alternaria leaf spot, Blackleg, Downy mildew	0.2 kg/ha 300- 800 l water/ha	AT	Spraying, Watering	Spraying during germination
<b>Golf lawns, Ornamental laws</b>	Fungal diseases	5 g/kg seeds	AT	Seed dressing	
<b>Golf lawns, Ornamental laws</b>	Fungal diseases	0.2 kg/ha 300- 800 l water /ha	AT	Spraying, Irrigation	
<b>Forest and Ornamental nurseries</b>	Fungal diseases	5 g/kg seeds	AT	Seed dressing	
<b>Forest and Ornamental nurseries</b>	Fungal diseases	0.05 %	AT	Dipping of roots	
<b>Forest and Ornamental nurseries</b>	Fungal diseases	0.25 kg/ha 300- 800 l water /ha	AT	Spraying, Watering	
<b>Wheat, barely, rye, triticale</b>	Fuzarioses, Bunt of wheat	0,5-1 kg/t seeds	AT	Seed dressing	For ecological agriculture only
<b>Wheat, barely, rye, triticale</b>	Exespot of cereals, Fusarioses, Rusts, Také-all disease	0,1 kg/ha	AT	Spraying	For ecological agriculture only
<b>Oil-seed radish for seed production for green manuring</b>	Blackleg and Sclerotinia stem rot	0.1 kg/ha 300- 400 l water /ha	AT	Spraying	3 applications max.
<b>Chestnut</b>	Ink disease	1 kg/ha 1000- 10000 l water/ha	AT	Spraying	10 applications max. in interval 14-30 days

AT - the protection period is given by the interval between the final application (last application) and the harvest).

#### **Safety distances and other precautions and restrictions with regard to the protection of human health, non-target organisms and environmental components:**

The product is not excluded from use in protection zone II. Groundwater and surface water resources.

#### **Recommendations and possible risks for the environment:**

The product does not require classification with respect to protection of birds, aquatic organisms, terrestrial vertebrates, bees, non-target arthropods (apart from bees), soil microorganisms and soil macro organisms and non-target terrestrial plants.

#### **Other restrictions:**

Contains *Pythium oligandrum* M1. Microorganisms may have the potential to provoke sensitising reactions.

Carry out the spraying under windless conditions or in gentle wind in the wind direction, away from people.

The treated land can be only entered after the product gets dry.

Do not eat, drink or smoke during work and after it until removing the protective aids and careful washing.

Wash the protective clothes and clean carefully the PPE that cannot be washed.

Do not use contact lenses when preparing the application liquid.

#### **Preparation of application liquid**

1. Fill the clean (no fungicide residues) sprayer tank with 2/3 water.

2. Each Polyversum package contains 1 or 2 bags (depending on package size) made from PE-PET/MET material and a filter. Shake each bag well and cut with scissors.

3. Gently pour Polyversum into the mixing tank or directly into the main sprayer tank.

4. Fill up with water to full volume.

5. Finalize the preparation while stirring into the sprayer tank.

The composition may contain particles up to 300 µm, so the use maximum 50 mesh filters in the sprayer is necessary. In case of tank mixes, do not mix the concentrates. Other products should be poured separately into sprayer tank, and the Polyversum should be poured in the tank last. The spray liquid must be stirred in transport and during spraying.

**Cleaning of application equipment:**

Application equipment after use rinse out with clean water and apply on surface of any plant cover, e.g. grasses.

**Other informations:**

**First aid instructions:**

**General Instructions:**

**If persisting health problems occur or in the case of doubts inform a physician, provide him/her with the information from the label, attached leaflet or safety sheet.**

**First aid in the case of aerosol inhaled during application:** Interrupt your work. Leave the treated area. Ensure physical and mental calmness.

**First aid after contact with skin:** Take off the contaminated clothes. Wash the exposed skin with water and soap, rinse the skin well.

**First aid after contact with eyes:** Remove contact lenses, if you are wearing them, rinse eyes with plenty of pouring tepid clean water. Contact lenses must not be reused, they have to be disposed.

**Firs aid if swallowed:** Rinse the mouth with water, do NOT provoke vomiting.

When seeking medical advice, inform the product you have been working with and the first aid you have provided. Further advice on first aid can be consulted with the toxicological information centre: Telephone continuously: 224 919 293 or 224 915 402.

The risks associated with inadequate efficacy of the product or its possible phytotoxicity bears exclusively the person using the product within the meaning of Article 51 (5) of Regulation (EC) No 1107/2009 of the European Parliament and of the Council.

**Protective equipment for dilution of the product and for spray applications:**

**Respiratory system protection:** not necessary; **Eye and face protection:** not necessary; **Body protection:** overall protective clothing according to ČSN EN14605+A1 or ČSN EN 13034+A1 or ČSN EN ISO 13982-1 or other protective clothes with the symbol /graphic mark “protection against chemicals” according to ČSN EN ISO 13688 (ČSN EN 340). **Head protection:** not necessary. **Hand protection:** rubber or plastic gloves with chemical danger symbol according to ČSN EN 420+A1 with the code according to Annex A to ČSN EN 374-1; **Foot protection:** protective boots (e.g. rubber or plastic boots) according to ČSN EN ISO 20346 or ČSN EN ISO 20347 (with regard to work in agricultural environment).

**Damaged protective equipment (e.g. torn gloves) should be replaced promptly.**

**If the worker during the actual application is sufficiently protected in the closed driver's cab, protective equipment is not necessary. However at least protective gloves have to be prepared in case of failure of the device.**

**Storage:**

The product is stored in original undamaged containers in a lockable dry store at temperatures 5-25 °C. When properly stored in a dry conditions, the shelf life of the product is two years from the date of manufacture.

**Disposal of packaging and residues:**

When disposing of packaging, proceed according to Act No. 185/2001 Coll. liquidation to an authorized person within the meaning of the Act.

**EU MRLs did not have to be established**