

 Benefis, ME

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microemulsion

imazalil 50 g/l + metalaxyl 40 g/l + tebuconazole 30 g/l

Fungicidal seed treatment intended for pre-planting treatment of cereal and soybean seeds.

Advantages:

- Highly effective at reduced concentration of the active ingredient due to innovative formulation ME
- Wider spectrum of action than that of most seed disinfectants due to combination of three active ingredients
- Formulation as microemulsion ensures maximum penetration of active ingredients into the seed, and powerful and prolonged protection during vegetation period
- Unique effect against root rots
- High level of fungicidal activity against a complex of diseases
- Bio-activator contained in the preparation has a growth-stimulating action promotes coleoptiles development and formation of a robust root system;

— Higher resistance to drought and frost

Action

Mode of action

The preparation contains three active ingredients - imazalil, metalaxyl, and tebuconazole that supplement each other and demonstrate pronounced synergy by ensuring high efficiency against seed infections affecting cereal crops at earlier development stages.

Metalaxyl has a systemic action and protect seeds against surface infection from the inside. It inhibits biosynthesis of nucleic acids in fungi.

Imazalil has a local systemic action and protects roots. Imazalil inhibits synthesis of ergosterol that has effect on permeability of pathogen cell membranes.

Tebuconazole has a systemic translocating action and protects the plantlet. Tebuconazole inhibits biosynthesis of sterol in pathogenic organisms, which results in changes in the membrane (its permeability), reduced reproduction and, eventually, death of the pathogenic cell.

Protective period

Bio-effect lasts from seed sprouting stage to tubing stage and until appearance of a flag of cereal crops. Due to its systemic effect, the preparation is efficient against surface and internal seed infection, and a number of disease excitants affecting the plant during a later vegetation period.

Speed of action

High. Fungicidal effect may be observed in 2 to 4 hours after seed treatment.

Spectrum of action

Ascochyta blight, bacterial blight, Helminthosporium root rot, stone smut, false dust-brand, oidium, Pythium root rot, seed molding, stripe disease, dust-brand, rhizoctonia radical rot, netted spotting, snow mold, stinking smut, Fusarium root rot(s), Fusarium blight, Fusarium snow mold, Cercospora crown rot, Cercospora blight, etc.

BENEFIS, ME HELPS FORM A ROBUST ROOT SYSTEM

The seed disinfectant shall be used even if there are no diseases, as this has a positive effect on growth and development of the root system and vegetative mass due to growth bio-activator contained in the formulation.

Usage regulations

Crop	Harmful object	Consumption rates of preparation, l/t	Consumption rates of working liquid, l/t	Method, treatment time, and application features. Period of manual (mechanized) work	Safety intervals (treatment frequency)
Spring and winter wheat	Dust-brand, stinking smut, Fusarium root rot, Helminthosporium root rot, seed molding, including Alternaria seed infection, powdery mildew (at earlier stages of development)	0.6-0.8	10	Treatment of seeds beforehand or immediately before sowing -(-)	-(1)
Winter wheat	Snow mold, Rhizoctonia root rot				
Spring barley, including malt barley	Dust-brand, false dust-brand, stone smut, Fusarium root rot, Helminthosporium root rot, Pythium rot, seed molding, netted spotting, including Alternaria seed infection	0.6-0.8	10	Treatment of seeds beforehand or immediately before sowing -(-)	-(1)

Soybeans	Fusarium root rot, Fusarium withering, Ascochyta blight, seed molding	0.6-0.8	10	Treatment of seeds beforehand or immediately before sowing -(-)	-(1)
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Application technique. Mix preparation method

Prepare the mix immediately before seed treatment. Fill the tank with water and add the required preparation dose while continuously stirring. Seeds shall be treated using treatment units intended for liquid preparations. Prepare the mix and treat seed in centralized treatment stations.

Compatibility with other pesticides

Compatible with insecticidal seed treatments and agrochemicals produced by Schelkovo Agrohimi used for treating seeds of cereal crops and soybeans.

Before large-scale application, chemical and biological compatibility with specific products at recommended doses must be verified.

Phytotoxicity

No phytotoxic effect when used in recommended doses.

Potential for resistance

Where recommended doses and preparation application technique are met, resistance of pathogenic organisms is unlikely to occur.

General information

Chemical class

imidazoles, phenylamides, triazoles

Transport and storage conditions

Keep the preparation in a room dedicated for pesticide storage. Storage temperature range - minus 10 °C to plus 30 °C

Shelf life

5 years.

Hazard class

Hazard class 2, high danger

Packing

5 liter PE container

Registrant

Schelkovo Agrohim, Russia

Manufacturer

Schelkovo Agrohim, Russia