



Messer, ME

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microemulsion

mefenoxam 210 g/l + fludioxonil 25 g/l

A special-purpose fungicidal seed treatment for sunflower seeds in the NANOformulation

Advantages:

- A perfect combination of active substances with the maximum spectrum of action
- Full control of soil and seed-borne infections
- The best efficacy against downy mildew, Fusarium blight and other diseases of sunflower
- The most efficient formulation (microemulsion)
- Is intended for both industrial use at seed production companies and agricultural use

Action

Mode of action

Mefenoxam is a phenylamide. It has a high systemic activity and shows protective and curative properties. It is effective against the surface and intraseed infections, is rapidly absorbed by seeds and is evenly distributed throughout the plant after sprouting, protecting seedlings and roots from both seed-borne and air-borne diseases. Mefenoxam is particularly effective against Oomycetes causing false powdery mildew (*Plasmopara helianthi*), as well as against several rots (*Pythium* spp., *Fusarium* spp., *Rhizoctonia* spp., etc.). The mode of action involves inhibition of protein synthesis in fungi by suppressing ribosomal RNA synthesis.

Fludioxonil is a phenylpyrrole. It has a contact action with long-term residual activity. It has a broad spectrum of action and is effective against Ascomycetes (particularly *Fusarium*), Basidiomycetes and imperfect fungi that enter the soil through seeds. It has no negative effect on beneficial microorganisms. The mode of action of fludioxonil involves the inhibition of glucose phosphorylation during cellular respiration, which disrupts the functioning of fungal cell membranes and slows mycelium growth.

Protective effect period

Messer, ME, ensures protection for up to 12 weeks.

Rate of exposure

The fungicidal effect occurs immediately after the treatment of seeds. It promotes even and healthy sunflower sprouts and protects against primary and secondary infections during the early stages of growth and development.

Spectrum of action

Downy mildew, white mould, grey mould, stem blight, *Fusarium* blight, root rots, seed mould, *Alternaria* blight

Usage regulations

Crop	Harmful object	Product consumption rate, l/t	Working liquid consumption rate, l/t	Method, time, features of application
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Sunflower	False powdery mildew (downy mildew), stem blight, white mould (foot sclerotinia), Fusarium root rot, Alternaria blight, seed mould, grey mould (seed infection)	5.0	10-15	Seed treatment immediately before sowing or in advance (up to 1 year)
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Application method. Working liquid preparation

Prepare the working liquid immediately before treating the seeds.

Fill the tank of the dressing machine one-third full with water and, with continuous stirring, add the required amount of the product. Flush the product container with water several times and pour the water into the tank of the dressing machine. Prepare the working solution and perform seed treatment at centralised treatment stations. Ensure a fully-mechanised process and effective ventilation.

The following dressing machines are recommended for seed treatment: PS-10A, Amazone, Mobitox, PSK-20, BZK-15, Xere-11 or similar machines intended for liquid preparations.

Compatibility with other pesticides

Trial mixing is recommended when used with other products. In case of changes in physical and chemical properties, co-use is not recommended.

Probability of resistance

There is no risk of resistance if the developed recommendations are strictly followed.

Phytotoxicity

Is not phytotoxic if the product application procedures are followed. Crops show a relatively high tolerance to the product.

General information

Chemical class

phenylpyrroles, phenylamides

Transport and storage conditions

Keep the preparation in a room dedicated for pesticide storage. Storage temperature range - minus 15 °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