Andermatt

Madex® Top

(MAPP 19213)

Madex® Top is a biological insecticide for the control of codling moth (*Cydia pomonella*). The active substance of Madex® Top is a *Cydia pomonella* granulovirus which must be ingested by the codling moth larvae for effective control. These viruses belong to the family of insect pathogenic baculoviruses that occur naturally in Lepidopteran species. Granuloviruses are very specific and tend to have just one target organism. Granuloviruses are registered insecticides and undergo the same stringent efficacy and safety tests as traditional chemical products.

USE & APPLICATION

- Shake product well, before use
- Add the required amount of Madex® Top to the spray tank and dilute with required volume of water
- Ensure the pH of the spray tank is kept between 5 and 8.5, use a buffer if necessary
- Start agitation of the spray tank, continue until all substances are dissolved
- Apply the prepared spray solution evenly to the crop, ensuring good coverage but avoiding runoff
- Repeat application after 8 days of full sunshine, or up to 14 days of part sunshine
- To clean the spray equipment after use, rinse the application equipment thoroughly with water

APPLICATION TIMING

For best crop protection, the first application of Madex® Top should be applied just before first egg hatch, and before the larvae enter the fruit. Degree day models can be used to help with the timing of the first application.

Pheromone traps should be used to monitor the flight of male codling moths. Research has shown that the codling moth does not develop at temperatures below 10°C. The female moths start laying eggs when evening temperatures (21.00) rise above 18°C. After the eggs are laid, the eggs take 90 degree days to mature. Therefore it is best to apply Madex® Top at 85 degree days, just in time for egg hatch. Degree days can be calculated by local forecasting models or by the Andermatt template (* contact local distributor or Andermatt UK).

Granuloviruses are sensitive to UV radiation; therefore, applications of Madex® Top must be repeated at intervals of 8 days of full sunshine or up to 14 days of part sunshine (where 2 partly sunny days equate to 1 day of full sunshine), to ensure constant coverage during the larval hatching period. Madex® Top can be applied up to 10 times per year.

RATES & WATER VOLUME

Apply at a rate of 100 ml/ha in a water volume of 200 to 1600 L/ha, depending on the crop and its development stage. Ensure that good coverage is achieved, but not to the point of runoff.

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STORAGE

We recommend storing Madex® Top under chilled conditions of ≤ 5°C, or in a freezer of -18°C. Keep out of direct sunlight.

RESISTANCE MANAGEMENT

Madex® Top offers a unique mode of action for controlling codling moth and should be used as part of an integrated pest management plan to help prevent resistance developing in codling moth populations.

KEY FEATURES & BENEFITS

- Provides population control of codling moth
- Rainfastness - Little or no loss if allowed to dry for 3-4 hours before rain
- Valuable mixing/rotational tool for resistance management
- No effect on beneficial insects or predatory mites
- Non-toxic to humans, livestock and wildlife
- No toxic residue levels are defined (no MRLs)
- No re-entry intervals (REI) or harvest intervals (HI)
- Suspension concentrate containing >3x10^{13} occlusion bodies of *Cydia pomonella* granulovirus (CpGV) per litre
- Approved for organic crops
- Easy to store - We recommend storing under chilled conditions of ≤ 5°C, or in a freezer of -18°C
- Remains a liquid at -18°C, so no need to defrost before use

Product	Madex® Top
Active Ingredient	*Cydia pomonella* granulovirus
Formulation Type	Suspension concentrate
Target Pest	Codling moth (*Cydia pomonella*)
Crops with Approval for Use	Apple, pear, quince
Mode of Action	Ingestion
Maximum Application Rate	100 ml/ha
Maximum Number of Applications	10 times per year
Water Volume	200-1600 L/ha
PH Requirements	pH 5 to 8.5
Harvest Interval	0 days
Chemical Compatibility	Can be tank mixed with a wide range of insecticides, fungicides and fertilisers. A pH level between 5 and 8.5 must be maintained in the spray tank, otherwise the protective protein capsule will be destroyed, and the active substance will be inactivated. Cannot be tank mixed with copper products, insecticidal soaps or lime sulphur.
Storage Requirements	We recommend storing under chilled conditions of ≤ 5°C, or in a freezer of -18°C. Keep out of direct sunlight.