

HELICOVEX® FAQ



What is Helicovex and how does it work?

The active ingredient of Helicovex consists of a living microorganism. It is a baculovirus product, also called NPV that infects larvae of corn earworm and other *Helicoverpa/Heliopsis* species. Helicovex can be sprayed on the crops as any other pesticides and works upon ingestion. Helicovex controls the larval stage of the corn earworm and does not affect adults.

When should first application of Helicovex take place?

The smaller the larvae, the better the control of Helicovex. It is recommended to target smaller larvae and eggs that are about to hatch because the larvae eat part of the eggshell during hatching. If applied on large larvae, damage might not be avoided in sufficient time. It is important to protect the plant during the whole larval hatching period until harvest or as long as the pest is present in the field.

What is the recommended application rate of Helicovex?

For most crops, we recommend to apply between 50 to 200 ml/ha with a reapplication after 6–8 days. If the targeted plant tissue is growing fast, such as the silks of sweet corn, it is recommended to apply 50 to 75 ml/ha in an interval of only 3 days. To prevent damage, higher application rates are recommended. Lower rates may be used during vegetative stage/before fruit set of the crops, or when tank mixed with other insecticides. It is preferable to apply several smaller doses than a single high dose.

PRODUCT-FACTS

Against

Target egg and young larva of corn earworm (*Helicoverpa spp.*)

Active ingredient

Helicoverpa armigera nucleopolyhedrovirus (HearNPV)

Formulation type

Suspension concentrate

Concentration

2.2×10^{11} HearNPV / fluid ounce
(7.5×10^{12} HearNPV / liter)



How to best apply Helicovex?

Most important is the good coverage of the plant parts that the larvae are feeding on and that run-off is minimized. With any application method, use water sensitive cards to control if enough product reached the targeted area (e.g. silk on sweet corn).

How long does it take until the larvae die?

After the larva got infected by the virus it shows symptoms of morbidity and dies within 3–7 days, depending on amount of ingested virus particles and the size of the larvae. A larva that died through virus infection is discolored and liquefied, releasing millions of virus particles, ready to infect other larvae.

Can Helicovex be tank mixed?

Yes, Helicovex is compatible with most insecticides, fungicides and fertilizers, as long as a pH of 5–8.5 is respected. Helicovex should be added last to the tankmix and used within the same day. Tank mixing with copper products is not recommended.

Do I need to apply Helicovex with an adjuvant?

Although the addition of feeding stimulants or other adjuvants are not necessary, the use of non-ionic or oil-based spreader/sticker and ultraviolet screening agent may enhance performance of Helicovex. Silicone-based spreaders should not be used with this product.

How should Helicovex be stored?

Helicovex should be either stored in the freezer (-8 °C) or refrigerator (5 °C). In the refrigerator it keeps 2 years. If stored in a freezer it will be ready to use as it remains liquid. At room temperature (approx. 23 °C), Helicovex should be used within 1 month.

What should be avoided when using Helicovex?

Do not allow product to heat up! Product containers or prepared tank loads should not stand in full sunshine longer than necessary. Temperatures above 40 °C will degrade the virus and result in a loss of quality.

Does Helicovex control other pests than corn earworm?

Helicovex does only infect *Helicoverpa/Heliothis* species. Besides corn earworm, also called cotton bollworm (*Helicoverpa zea*) it will infect tobacco budworm (*Heliothis virescens*). Helicovex does not control other pests such as the European corn borer, armyworms, cutworms or non-lepidopteran species.

What is the difference between Helicovex and other products that are commercially available?

In contrast to most insecticides, the larva does not have to ingest a certain amount of product to reach a toxic level. Already a few virus particles are enough to cause infection of the larvae, as the virus replicates inside the host cells until all cells are infected. Helicovex has a minimal PHI, a 0 MRL and does not harm any beneficial insects and does therefore not cause secondary pest outbreaks of spider mites or aphids etc. It is an excellent tool to control insecticide resistant populations of corn earworm.

Always read and follow label directions!

Advantages of Helicovex

- ✓ Effectively targets corn earworm
- ✓ Excellent resistance management tool
- ✓ Zero residues
- ✓ Minimum pre-harvest interval
- ✓ Highly selective
- ✓ Non-toxic and safe
- ✓ Harmless to beneficial insects
- ✓ For conventional and organic pest management
- ✓ Rainfast

Before using Helicovex, please read and follow the label directions completely.

