Product data sheet

# Enermix

## *Eretmocerus eremicus* and *Encarsia formosa* | Parasitic wasp




- For the control of greenhouse whitefly and tobacco whitefly
- Can be used at fluctuating temperatures
- Can be used preventively or at first signs of pest presence

## Use for

### Pests

Greenhouse whitefly (*Trialeurodes vaporariorum*); Tobacco whitefly (*Bemisia tabaci*).

## How it works

### Mode of action

Adult female parasitic wasps parasitize second to fourth stage larvae of the whitefly. Host feeding also takes place.

### Appearance

- Adults are wasps of about 1 mm in size. *Encarsia formosa* is black with a yellow abdomen, *Eretmocerus eremicus* is yellow
- Immature stages develop inside the host



*Encarsia formosa* and *Eretmocerus eremicus* pupae on *Trialeurodes vaporariorum*



*Encarsia formosa* adult



*Eretmocerus eremicus* adult

### Visual effect

*Trialeurodes vaporariorum* pupae parasitized by *Encarsia formosa* turn black, *Bemisia tabaci* pupae become brownish. Whitefly pupae parasitized by *Eretmocerus eremicus* turn yellow, the adult parasitic wasp can be seen clearly within the parasitized whitefly pupae shortly before it emerges.



*Encarsia formosa* female parasitizing on whitefly



*Eretmocerus eremicus* female parasitizing on whitefly



Watch the biological control video of Encarsia formosa on whitefly

## Product specifications

### Pack size

3,000; 15,000 pupae.

### Presentation

Cardboard strips with 5 cards each, wrapped in plastic, in a cardboard box, each card holds 60 parasitized whitefly pupae: 30 *E. formosa* and 30 *E. eremicus.*

### Developmental stage

Pupae.

### Carrier

None.

## Directions for use

### Application



Watch the Application video of Enermix

- Open package carefully inside the greenhouse
- Bend and tear off the strips opposite to the mounting hole
- Make sure not to touch the pupae during handling
- Suspend the cards in the crop, if possible approximately 75 cm under the plant head
- Avoid to hang cards at places exposed to direct sunlight

### Dosage
The dosage of Enermix depends on climate, crop and whitefly density and should always be adjusted to the particular situation. Start introduction preventively soon after planting of the crop. Introduction rates typically range from 1-10 per $m^2$/release. Releases should be repeated at least 3 times at weekly intervals or until control is achieved. Depending on the specific situation, it may be better to switch to the use of En-strip or Ercal. Consult a Koppert advisor or a recognized distributor of Koppert products for advice on the best strategy for your situation.

### Environmental conditions
*Encarsia formosa* is most effective at temperatures between 20°C and 25°C (68 and 77°F). At a 24 hours average temperature below 17°C/63°F the control of whiteflies may be insufficient. For optimal performance of *Eretmocerus eremicus* the 24 hour average greenhouse temperature needs to be at least 20°C/68°F. *Eretmocerus eremicus* is still active at temperatures above 30°C/86°F.

### Combined use
Enermix is best to be used in combination with generalist predatory mites (*Amblyseius swirskii, Neoseiulus cucumeris, Amblydromalus limonicus* or *Amblyseius andersoni*) or, in tomato, with predatory mirid bugs (*Macrolophus pygmaeus* or *Nesidiocoris tenuis*).

### Side effects
Pesticides can have (in)direct effects on biological solutions. Find out which pesticides have side effects on this product.

## Product handling

### Storage time after receipt
Apply as soon as possible after receipt. If necessary, the product can be stored for 1-2 days.

### Storage temperature
8-10°C/47-50°F.

### Storage conditions
In the dark.

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