

## Oxybee FAQ webpage

### 1 – Where can I buy Oxybee?

Oxybee is sold in the European Union (except Austria). The distribution network may vary from one country to another. Therefore, we advise you to check the information with your local distributor, that you can find on [this link](#).

Or alternatively to contact us by email at this address [info@vetopharma.com](mailto:info@vetopharma.com)

### 2 – Is a prescription necessary to buy Oxybee?

Oxybee is a veterinary medicine that doesn't require a prescription. Please contact your local distributors to learn more about how to buy Oxybee in your country.

### 3 – What are the components of Oxybee?

Oxybee is a veterinary medicine that contains oxalic acid dihydrate (3,5%), glycerol, sucrose, anise and eucalyptus essential oils.

The formulation of oxalic acid in combination with sucrose and glycerol increased the mortality of varroa mites in laboratory tests.<sup>1-2</sup> The formation of small droplets of solution that last longer in the colony (increased hygroscopy) is assumed to be the cause of this effect, enabling a better distribution of oxalic acid solution in the hive.<sup>1-2</sup>

As a result, field data have shown a higher efficacy of Oxybee compared to a standard formulation of oxalic acid and sucrose.<sup>3</sup>

*References: 1 - CVMP assessment report for Oxybee (EMA/V/C/004296/0000) – 2017 / 2 - Milani (2001) - Activity of oxalic acid and citric acids on the mite Varroa destructor in laboratory assays - Apidologie 32 (2001) 127–138 © INRA/DIB-AGIB/EDP Sciences, 2001 / 3 - Poster G. Braun et al., DVG-Fachgruppentagung "Parasitologie und parasitäre Krankheiten", Hannover, Germany, Juni 12-14, 2017.*

### 4 – When is the best moment in the year to treat my hives with Oxybee?

Oxybee is a treatment that must only be applied in brood-free colonies, because it is applied only once (single application) and will target only the phoretic mites (mites on adult bees). Oxybee is generally applied at the end of autumn or in winter, when the queen stops laying eggs and the bees form a winter cluster. If you wish to use Oxybee but there is brood in your hives (either in winter in the Southern countries, or during the season when there are no supers on your hives) you have to create an artificial brood-break:

- Either by caging the queen for 25 days before applying the treatment (which is a widely used method in Italy).
- Or by a complete brood removal, or splitting the colonies.

### 5 – Are there any temperature constraints when using Oxybee?

The outside temperature when the treatment is applied must be at least 3°C.

When you first use Oxybee, or when you reuse the mixture after placing it in the refrigerator: placing the bottle in lukewarm water (30-35°C) will allow the sucrose powder to dissolve easily in the solution and will be more pleasant for the bees.

### 6 – What dosage of Oxybee should I use per hive and how should I apply it in my colonies?

With the help of a syringe or a dosing gun, apply Oxybee by dribbling a maximum dose of 5 to 6 ml of the solution into each occupied bee space between two frames in the brood box.

The solution should be dribbled directly onto the bees. You must not exceed 54 ml of solution per colony. Oxybee must be used on vertical frames hives where you have access from the top.

#### 7 – How many hives can I treat with a single bottle of Oxybee?

You can treat about thirty hives with a single 1 kg bottle of Oxybee. It will depend on the strength of your colonies, as a maximum dose of 5 to 6ml of Oxybee should be administered once per occupied bee space between the frames. The total amount of Oxybee administered to a colony should not exceed 54ml.

#### 8 – How many treatments can I carry out in one year?

It is recommended to use Oxybee only once per worker bee generation. In most climates, natural brood breaks will only happen once a year – mainly in winter due to low temperatures, and sometimes in summer due to high temperatures. However, if required, Oxybee can also be used in an artificial brood break after queen caging, creating splits or brood removal.

#### 10 – Can I use Oxybee for organic beekeeping?

Yes, since the oxalic acid, the active ingredient of Oxybee, is on the list of authorized substances for organic beekeeping of the European Medicine Agency. We still advise you to get in contact with your local organic honey certifier to confirm compliance with their own specifications.

#### 11 – What is the Oxybee shelf life?

The shelf life of Oxybee is 2 years from the manufacturing date. Once you have mixed the sachets of sucrose with the oxalic acid dehydrate solution in the Oxybee bottle, you can store the mix for one year inside your fridge at a temperature between 2°C – 8°C.<sup>1</sup>

*1 - If the mix has been done in compliance with the instructions.*

#### 12 – What are the differences between Oxybee and other oxalic acid treatments that have a Market Authorization?

- **The combination of sucrose and glycerol in the oxalic acid solution is a key advantage of Oxybee.**<sup>1</sup> The formulation of oxalic acid in combination with sucrose and glycerol increased the mortality of varroa mites in laboratory tests. The formation of small droplets of solution that last longer in the colony (increased hygroscopy) is assumed to be the cause of this effect, enabling a better distribution of oxalic acid solution in the hive.<sup>1-2</sup> As a result, field data have shown a higher efficacy of Oxybee compared to a standard formulation of oxalic acid and sucrose.<sup>3</sup>
- Oxybee offers a more advantageous storage condition after mixing, compared to the other registered products. In comparison, the other veterinary medicines based on oxalic acid and sucrose only must be used within a maximum period of 30 days after mixing.
- You do not need to wear a respirator mask to use Oxybee because the oxalic acid is already mixed inside the bottle. On the other hand, you'll still have to wear safety glasses, acid-proof gloves and protective clothing (long sleeves, pants, shoes).

References: 1 - CVMP assessment report for Oxybee (EMA/V/C/004296/0000) – 2017 / 2 - Milani (2001) - Activity of oxalic acid and citric acids on the mite *Varroa destructor* in laboratory assays - *Apidologie* 32 (2001) 127–138 © INRA/DIB-AGIB/EDP Sciences, 2001 / 3 - Poster G. Braun et al., DVG-Fachgruppentagung "Parasitologie und parasitäre Krankheiten", Hannover, Germany, Juni 12-14, 2017.

### 13 – Does oxalic acid leave residues in honey?

Oxalic acid is a natural component of honey. Depending on the type of honey, concentration varies between 3 and 761 mg / kg<sup>1</sup>. The majority of honeys contain less than 200 mg / kg of oxalic acid.<sup>2</sup> Research indicates<sup>3</sup> that the oxalic level right after treatment increases only slightly or not at all, depending on the mode of application (dribbling, spraying, sublimation). So, only minimal or no residues at all can be detected in honey right after treatment.

References : 1 - Nanetti et al. 2003 / 2 - Wibbertmann 2003 / 3 - Eva Rademacher, Marika Harz. Oxalic acid for the control of varroosis in honeybee colonies – a review. *Apidologie*, Springer Verlag, 2006, 37 (1), pp.98-120. hal-00892183

### 14 – How to correctly recycle my bottle of Oxybee once used?

We advise you to contact your veterinarian, pharmacist or local recycling company, to find out the local requirements for the disposal of this type of waste, as it may vary from one country to another.

#### **OXYBEE powder and solution for 39,4 mg/ml bee-hive dispersion for honey bees.**

**Composition:** 1 ml of mixed bee-hive dispersion contains 39,4 mg of oxalic acid dehydrate.

**Indication(s) for use:** For the treatment of varroosis (*Varroa destructor*) of honey bees (*Apis mellifera*) in brood free colonies. **Withdrawal period(s): Honey:** zero days. Do not use

during honey flow. **Special precautions:** This veterinary medicinal product is highly acidic and could have irritating and corrosive effects on the skin, eyes and mucous membranes.

Personal protective equipment consisting of protective clothing, acid-proof gloves and safety glasses should be worn. **Marketing authorisation holder:** Dany Bienenwohl GmbH,

Geyerspergerstr. 27, 80689 Munich, Germany. **Distributed by:** Vêto-pharma, 12-14 avenue de la Croix Martre 91120 Palaiseau, France. **V0119**

**Oxybee is a veterinary medicine. Please ask advice to your veterinarian, pharmacist or sanitary organization. In case of persistence of clinical signs, consult with your veterinarian. Read carefully the instructions on the product label before use.**

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