

EVAPORATOR CLASSIC II

Long-term evaporator for formic acid for the varroasis treatment Order-No. 30027

Operating Instructions

Please follow these operating instructions exactly since only then a successful treatment can be guaranteed!

PLEASE NOTE: The manufacturer assumes no liability for damages resulting from failure to observe these instructions! The use of the evaporator is at your own risk!

Since the evaporator CLASSIC II requires the brood nest temperature for its function, this evaporator cannot be used in the later autumn (October) or with brood-free colonies. For these applications we recommend our evaporators UNIVERSAL or PROFESSIONAL, which have a more advanced evaporation principle independent of brood nest and outside temperature.

Before using the evaporator, check that all the parts are present.

Name/ Description	Order-No. of spare part	Name/ Description C	rder-No. of spare par
Operating Instructions		screw-on unit	3103
bottle	31037	small wick	30004
base plate	31038	large wick	30005
wick cover	30016	One wick of each size is supplied per evaporator, but they are included in the delivery in packs of ten.	
lid	31012	2 screws, stainless steel ø3x	12 30006

The NASSENHEIDER Evaporator is a long-term evaporator for the continuous evaporation of formic acid 60% ad us. vet. for the treatment of varroasis (Varroa destructor) of the honey bee (Apis mellifera).

The NASSENHEIDER Evaporator, together with formic acid 60% ad us. vet., is a bee drug approved in Germany (published in Federal Law Gazette No. 31, dated July 11, 2000 / Standard authorisation No 2469.99.99).

The high effectiveness of the NASSENHEIDER Evaporator has been proven in numerous scientific studies - for further information, consult our website.

The long-term treatment with formic acid ensures the successful treatment of Varroa mites even in the already sealed brood.

Areas of application:

Varroa mite ("Varroa destructor) of the honey bee (Apis mellifera). **Counter Indications**

Do not use during honey yield. Use only after the last honey harvest of the year. The waiting time to the next honey harvest is naturally ensured by hibernation. No treatment may take place in the spring.



Caution is advised when using the formic acid treatment:

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- 1. Always wear protective gloves, goggles, plastic apron and plastic boots when filling the bottle as well as when inserting it into the bee colon
- Only fill the evaporator outdoors.
 Keep a bucket of water close by.
- 4. Keep formic acid out of reach of children.
- The solution causes burns, do not inhale vapor.
- 6. If substance gets in contact with eyes, then rinse eye
- with plenty of water and consult doctor. 7. Immediately consult a doctor in the event of an accident
- or if feeling unwell.

Conditions for a successful treatment:

- 1. Minimum treatment duration of 10-14 days has to be adhered to. Otherwise the acid would not work across a complete brood cycle! The treatment across a longer period, however, is not harmful.
- 2. Closing the lattice floor during treatment with the appropriate plates and foam strips.
- 3. Honey harvest and removal of the honey super before starting the treatment.
- 4. Normal opening of the entrance hole according to the hives size. 5. Hives in a windy location are not ideal, therefore:
- move the entrance hole away from the main wind direction or use a hedge, fence or similar as wind break.
- 6. Observe mite fall during treatment: If the mite fall does not sink significantly after 14 days of treatment (e.g. due to reinvasion from a neighbouring hive), then treatment has to be extended or repeated after a short break.
- 7. For frames and hives only use stainless steel screws, nails and wire for long-term use.
- 8. temperature range: Since the evaporator is used in the brood nest area, the bees instinctively ensure a temperature of approx. 35°C. Thus a normal sized brood nest is required during treatment. Therefore, treatment is only possible until September. In midsummer, however, a well-insulated hive lid and a shady location of the hive are helpful to prevent too high temperature near the evaporator.

Set-up and assembly of evaporator



Treatment process

At the apiary: 1. Mount the frame (see figure above):

Fix the base plate to the bottom beam of the frame with the two screws supplied. Push it into one corner of the frame as far as it will go. The pre-assembled evaporator is clipped into this base plate shortly before it is hung in the hive. The small foot attached to the screw-on unit can be removed for narrow types of frames

The lid is used to close the pre-filled bottle during transport to the apiary. Recommendation: Store in the lid holder in the base plate during treatment!

2. Dosage / Filling the bottle

Recommended dose per super for single- or doublesuper colonies

first treatment in July / August

15-20ml / super and day with 60% formic acid > Total filling quantity 200ml

- second treatment in September
- 10-15ml / super and day with 60% formic acid > Total filling quantity 150ml

In colonies with two brood supers, one evaporator must be used per super.

3. Transporting the bottles to the hives

For transport, close the bottles securely and position them upright in an enclosed, acid-resistant plastic box for safety reasons.

Attention: It is mandatory to adhere to the safety precautions (see Page 1 lower left)!

The use of the evaporator is at your own risk!

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4. Wick selection and mounting

- In general the smaller wick (18 cm² evaporation surface) should be used. If a check shows that the evaporation rate is below the recommended area (below 15 ml in the summer, below 10 ml in the autumn), the larger wick (30 cm² evaporation surface) should be used.
- For each new filling a new and dry wick should be used which is inserted into the wick guides. Then the wick cover is placed in position so that it is pushed over the walls of the outlet space with the lower brackets outside. For dismantling, the brackets of the wick cover are pulled apart once again.
- Take care! Hives which cement together strongly should be treated without wick cover.

5. Connecting the screw-on unit, final assembly of the evaporator

- wear protective gloves
- place screw-on unit on straight
- Insert the tab between 2 engagement
- lugs as anti-rotation device.



6. Clip mounted evaporator into the base plate from above until it is firmly in place.

nut firmly!

7. Hanging of the evaporator into the hive

- The frame with the evaporator is hung next to the brood nest, away from the entrance hole and connected to the first brood free comb. Due to the constant temperature of 35°C there the evaporation largely occurs independent of the exterior temperature.
- Single super hives get one evaporator and twin super hives get two where possible.
- If two super-hives are treated with one evaporator it must be ensured that the recommended dose for two supers evaporates from this evaporator (application of the large wick and where appropriate refilling of the acid supply after approx. 5 days).

For two supers the hanging occurs in the upper super in opposite arrangement to the lower super.

8. Evaporator remains in beehive for at least 10-14 days.

9. After 2 days check the evaporation quantities

To do this, remove the evaporator together with the frame. The evaporated acid quantity in ml (cm³) can be read off the scale on the side.

- The amount evaporated so far is compared with the recommended daily dose (see point 2. Dosage).
- Determined by e.g. strengthened wafting of the bees at higher temperatures a higher rate of evaporation can be measured. In this way a part of the acid vapour escapes largely unused and the storage container becomes prematurely empty. Then it must be refilled in order that the given treatment time can be adhered to.
- In the first 2-3 days exceeding the dosecan still be tolerated as the hold absorbs a part of the acid vapour. This time should be used for control and possibly change of the dose- this is particularly important in July/August due to the more sensitive young bees.
- Retrospective filling of the evaporator is possible. A longer treatment time is not damaging for the bees.
- The minimum dose of 15 ml/day and super (following centrifugation) and 10 ml/day (prior to the brood pause) may not be gone below, as the success of the treatment would not then be guaranteed.
- If too low an evaporation rate is established on checking the larger wick must be used. Shorten the wick if the dose is too high.

Treatment concept throughout the year Period Action Additional information Hang drone frame next This measure reduces varroa April - June to the brood nest. Then infestation significantly regularly cut out the throughout summer. freshly covered drone brood. Wir empfehlen eine Milbenkontrolle durch Zählung des June natürlichen Milbentotenfalls auf dem Varroaboden: Etwa ab 20. Juni 2 x1 Woche lang gefallene Milben after the last first treatment with Remove the last honeycomb 60% formic acid honey and, if necessary, supply bee harvest: - Hang evaporator frame food, preferably at the same time. mid July / - Close lattice floor Do not restrict brood nest by August premature supply of winter feed. then e.g. with feeder frame feed September second treatment with (4 weeks 60% formic acid later) third treatment ("final October Treatment only necessary, if

(4 weeks mite removal") with 85% - strong infestation is suspected later) formic acid. - reinvasion (e.g. due to robbing) -> highest daytime temperature > 10°C! Attention: Because brood activity decreases considerably in October, but the Nassenheider CLASSIC II needs the brood nest temperature to function properly, October treatment is only possible with our advanced evaporators PROFESSIONAL (Art. 30020) or UNIVERSAL (Art. 30025 or 30026)! When using higher concentrated FA (>60%) use a wick one size smaller and fill 25% less acid into the bottle.

November To check if treatment has been successful: There should be no more than 1 dead mite per day. With successful "final mite removal," much better results should be achieved.

Durability of the Wick

The wicks are intended for single use. They are available as spare parts in packs of ten (small wicks order no. 30004 / large wicks order no. 30005).

The use of the evaporator is at your own risk!

Additional Information

Excerpt from the available accessories

- replacement wicks (Order No. 30004 / 30005) - screws from stainless steel
- Laboratory bottle for filling (500 ml)

Further products

- Nassenheider evaporator PROFESSIONAL Order No. 30020
- Nassenheider evaporator UNIVERSAL, Order No. 30025 or 30026
- Nassenheider INVERTO, Order No. 401001 or 401002

Please ask for our current price list.

Please refer to the current information incl. FAQ list on the website of the manufacturer: www.nassenheider.com Website of the inventor, Mr. Bruno Becker: www.bienen-becker.de

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