

Offer for bees

Apiwarol®

Apistym

Biowar®



About company

About Us

Biowet Puławy Ltd. is Polish modern veterinary medicine production plant. Our operations protect health of both animals and people. We supply latest generation effective and safe medicines for veterinary services, farming and breeding sectors. Currently we offer more than 70 preparations, including vaccines, diagnostic preparations, antibiotics, calcium preparations, sulphonamides, antiparasitic preparations, mineral and vitamin supplements and a number of other specialized groups of medicines for multiple species of animals.

Good traditions

For over 100 years preparations produced in Puławy have significantly contributed to controlling and keeping in check such dangerous diseases as rinder pest (viral cattle disease), tuberculosis, brucellosis, Newcastle disease, varroosis of honey bees. The 90s were a turning point for the existence of Biowet. An Act of Law titled "Resolution on privatization of the plant in the form of employee-owned company" has been signed. Following completion of the privatization process, in 1997, all employees became shareholders and at the same time also owners of the plant. From the perspective it is clear that company's privatization proved highly successful, as one of the few.

Investing in quality and safety

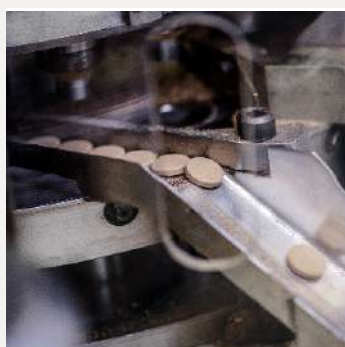
Company's objective is producing safe and effective medicinal products of adequate quality, in line with applicable requirements of pharmaceutical legislation. Products are being improved by implementing new technologies and research methods.

Production compliant with GMP standards is ensured by modern equipment and auxiliary systems (purified water, injection water, purified steam, nitrogen, compressed air). The Department has modules for production of microbial and mycological antigens, module for work with microbes BH-III and medium preparation room. Works on microbes and aseptic operations are carried out under class A/B laminar exhaust. Modern production technologies comply with GMP standards and the implemented pharmaceutical Quality Assurance System guarantee that good, effective and safe medicinal products are released.

GMP certificates confirm high quality standards compliant with Directive 2003/94/EC for all forms of medicines – injection, biological and non-sterile, granted based on periodic inspections by Senior Inspector of Pharmaceutics.

Quality recognized around the world

The most critical test of company's operations is the assessment by its customers. High quality of medicinal products GMP certificates of compliance with Community Directives, granted by competent body, allow expanding our customer base by foreign customers – Biowet cooperates with partners from Denmark, Lithuania, Latvia, Malta, Croatia, Bulgaria, The Netherlands, Belgium, Spain, Italy, Greece, Sweden, Albania, Ukraine, North Macedonia, Georgia, Serbia, Bosnia and Herzegovina, Switzerland, India, Malaysia, Slovakia, China, Bangladesh, Czech Republic, Ireland, MENA countries.



Apiwarol®

Fumigation tablets for honey bees



The best results in controlling varroosis are achieved by fumigating with Apiwarol:

- ✦ **In spring**, twice.
- ✦ **In autumn**, two to three times at intervals of 4-6 days, when the colony has the least sealed brood in the hive.



The tablet should be ignited in a specially shaped wire holder and any flame produced should be blown out.

The smoldering tablet should be inserted through the entrance to the hive and placed on the lower board under the frames.

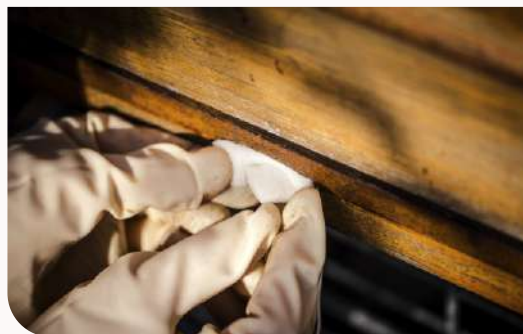
When using Apiwarol tablets in polystyrene hives, it is necessary to place fireproof inserts on the bottom of the hive beforehand, because the smoldering tablet can damage the lower board.(1)

CONTROL OF VARROOSIS

in bees caused by *Varroa destructor*

Amitraz 500 mg/tablet

Apiwarol tablet contains one therapeutic dose of amitraz, sufficient for a single fumigation of a bee colony.



Close the outlet for 20 minutes. Then open the outlet and check whether the tablet has burned. **If the tablet has not burned, the procedure should be repeated.**

In hives with polystyrene elements, the tablets can be burned on a strip of metal mesh.



Place the smoldering tablet on a narrow (3-4 cm) strip of dense metal mesh. Insert the metal mesh strip with the smoldering tablet into the hive, positioning it on the bottom board beneath the frames.



**1 tablet/one-time
fumigation of the bee colony**

Literature:

1) Chorbiński, P.: *Eradicating Varroa mite in bees* 2nd extended edition, p. 50

Apiwarol®

12.5 mg, Fumigation tablets for honey bees

Active substance and excipient content

Amitraz 12.5 mg/tablet

Therapeutic indications

Diagnosing and combating varroosis caused by *Varroa destructor*.

Contraindications

Do not use during production of honey intended for human consumption.

Do not conduct fumigation at the temperature below +10°C.

Do not use in case of hypersensitivity to the active substance or to any of the excipients.

Adverse reactions

Improper use of the product may lead to brood dying.

Fumigation may cause bee agitation.

Any adverse reactions emerged after administration of the product or any observed symptoms not listed in the leaflet (including symptoms reported in humans following exposure to the product) should be reported to the competent veterinarian, Marketing Authorization Holder or the Office for Registration of Medicinal Products, Medical Devices and Biocidal Products. The report form should be downloaded from <https://www.urpl.gov.pl> (Department of Veterinary Medicinal Products).

Amount to be administered per species, method and route of administration

One tablet contains one therapeutic dose sufficient for a single fumigation of a honey bee colony.

Hold a tablet with the tongs and set it on fire, blowing off any possibly emerging flame. Place the smouldering tablet on a narrow (3-4 cm) strip of thick metal netting or specially bent wire feeder, enabling access of air to the tablet. Introduce the smouldering tablet together with the netting into the hive through the entrance, and place it on the bottom board beneath the frames. Cover the entrance for 20 minutes. Next, uncover the entrance and check if the tablet has burnt completely. If not, repeat the procedure. While diagnosing varroosis, adhere to the above procedure, after placing a sheet of paper covered with vegetable fat at the bottom board. Remove the sheet of paper and check for presence of the mites on it an hour after fumigation.

Instructions for use

Apiwarol is exclusively effective on *Varroa destructor* mite attached to the body of the bee. It does not destroy the mites and its developmental forms found on encrusted brood. The best results in varroosis treatment are obtained if fumigation is applied twice in spring and two or three times in autumn at 4-6 day intervals, when there is the smallest amount of encrusted brood in the hive. In the honey production period, varroosis should be fought by cutting off the encrusted drone brood.

Fumigation should be performed in the evening, after bees have completed their flight. As amitraz is likely to penetrate into honey, autumn treatment should be performed after stock of honey intended for human consumption is removed from the hive.

Withdrawal period

Honey – 5 days

Do not use during production of honey intended for human consumption.

Special precautions for storage

Keep out of the sight and reach of children.

Store below 25°C. Store in a tightly closed container to protect from light and humidity. Do not use this veterinary medicinal product after the use-by date given on the label. Shelf life after first opening the packaging – 24 days.

Special warnings

Special precautions to be taken by the person administering the veterinary medicinal product to animals:

Effect of Amitraz on human body has not been fully recognised. Wear a protective mask during the procedure to avoid smoke inhalation. In case of observing any alarming symptoms following exposure to the product, such as vomiting, cardiac arrhythmia or any nervous system disorders, immediately seek doctor's assistance and present the doctor with the information leaflet or package. People with known hypersensitivity to any ingredient of Apiwarol should avoid contact with the veterinary medicinal product. Do not eat, drink or smoke during the procedure. Wash hands after the procedure is complete.

Interaction with other medicinal products and other forms of interaction: Unknown.

Overdose (symptoms, emergency procedures, antidotes):

Administration (burning in the hive) of a larger number of tablets than recommended may cause excessive agitation of bees.

Pharmaceutical incompatibilities:

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products. Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products Amitraz is toxic for fish, therefore attention must be paid to prevent disposal of the product to any bodies of water. Medicines should not be disposed of via wastewater or household waste. Ask your veterinary surgeon how to dispose of medicines no longer required. These measures should help to protect the environment.

Package size:

An LDPE container with a lid, containing 25 tablets, wrapped in a cardboard box.

Shelf life: 1 year

Other information

For more information about this veterinary medicinal product, contact the Marketing Authorization Holder.

For animal treatment only.

Subject to medical prescription – prescription drug.

To be administered under veterinary supervision.

Marketing authorization number: 740/99

SPC: 2015-09-30



Apistym

ginseng extract, lactic acid, sucrose

Bee immune-boosting product
Supplementary feed mixture for bees



Boosts resistance of bee colonies to diseases, especially to Nosema disease

Accelerates bee development

Made from natural ingredients, no withdrawal period for honey



Indications:

Apistym is recommended to administer in the beehive to enhance bees' immunity. This supplementary feed reduces the spread of infection with *Nosema apis* and *Nosema ceranae*. Application of this supplementary feed during infections, especially with *Nosema apis* and *Nosema ceranae*, reduces pathogen contamination.

Posology and methods of administration

Shake before use!

Preparing Apistym with sugar syrup solution. Autumn feeding – 4 ml of Apistym per 1 litre of sugar syrup. Sprinkling beeways, stimulative feeding – 20 ml of Apistym per 1 litre of sugar syrup. Syrup temperature should not exceed 50°C.

Spring and summer usage

Sprinkle beeways with a solution of Apistym in sugar syrup (20 ml of the product per 1 litre) twice – 5-10 ml per beeway (at an interval of 7-10 days). A solution of Apistym for sprinkling beeways might be administered during stimulative feeding – 0.5-1 litre per colony. Use this dosage during every stimulative feeding.

Apistym might also be administered in a sugar cake – 4 ml of the product per 1 kg of cake per colony.

Ingredients in 1000 ml:

- * ginseng extract 50 g
- * lactic acid 8,3 ml
- * sucrose 500 g

Spring feeding - accelerates the development of bees.

Autumn feeding - increases the survival rate of bee colonies during winter.

The ginseng extract contained in Apistym influences the increase of phenoloxidase levels (an enzyme involved in the immune response), boosting the immunity of the colony and enhancing its vitality. As a result, bees are better able to combat infections caused by pathogens. Apistym administered during autumn feeding increases the survival rate of bee colonies in winter, while its use in spring accelerates their development.

Autumn usage

Apistym should be administered with sugar syrup solution or prepared bee feed in a dose of 4 ml of the product per 1 litre of syrup. Sugar syrup or feed prepared with Apistym should be administered in colonies during autumn feeding. Adjust feed amount to the colony's strength. Recommended Apistym's dosage per one colony: 40 ml (10 litres of syrup). In case of administering a smaller dosage a supplementary, double sprinkling (at an interval of 7-10 days) of beeways is recommended (solution of Apistym in sugar syrup – 20 ml of the product per 1 litre, 5-10 ml per beeway).

Bottle volume: 200 ml

Veterinary identification number: α PI0614003p



Full product description on the packaging and at www.biowet.pl

HOW TO USE?

Apistym

Dosage and administration

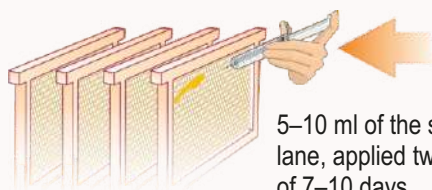
Autumn use

- **Administration with syrup:** 4 ml of Apistym per 1 liter of sugar syrup



Recommended dose of Apistym per colony: 40 ml (10 liters of syrup). The amount of feed should be adjusted to the strength of the bee colony. The temperature of the syrup should not exceed 50°C.

- **Application on the frames** – in case a smaller amount of syrup is administered, it is recommended to pour the Apistym solution in sugar syrup into the spaces between the frames at a concentration of: 20 ml of Apistym per 1 liter of sugar syrup.



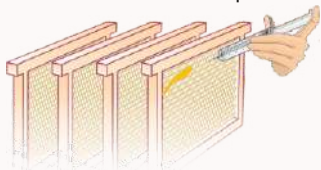
5–10 ml of the solution per bee lane, applied twice, at an interval of 7–10 days.

Spring and summer use



The solution for spring and summer administration should be prepared by mixing 20 ml of Apistym with 1 liter of sugar syrup.

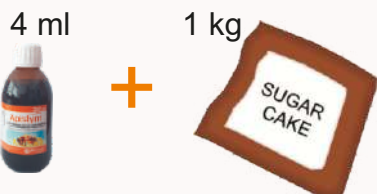
- **Application on the frames** – pour the SOLUTION into the bee lanes.



5–10 ml of the SOLUTION (20 ml of Apistym per 1 liter of sugar syrup) per bee lane, applied twice, at an interval of 7–10 days.

- **Administration as stimulating feed:** the SOLUTION prepared for pouring can also be administered as stimulating feed in the amount of 0.5–1 liter per colony. This dosage should be used for each stimulating feeding.

Administration with cake



Apistym can be administered with cake, at a dose of 4 ml of the product per 1 kg of cake per bee colony.

Shake Apistym well before use. Use immediately after opening. If the entire bottle is not used, the product can be stored in a refrigerator for up to 14 days.

Full product description on the packaging and at www.biowet.pl

Biowar®

Strips for placing in honey bee hives

CONTROL OF VARROOSIS

Amitraz 500 mg/strip



Biowar is intended for hanging in bee hives in a dose: **2 strips per 1 honey bee colony.**

- * **Spring treatment** – before the first commercial nectar
- * **Autumn treatment** – after the final harvest of honey (end of summer/autumn).

Place Biowar strips in aisles with the highest bee activity, as these are locations with the largest amount of parasites. By introducing a stick into a specially prepared hole in each strip, we can easily hang the strip in the frame-separating aisles.

Expand the aisles before hanging the strips to provide free bee access from both sides. In hives with side bars between the frames, this may be done by placing two bars per one frame-separating aisle.



In vertical hives, hang the strips at a lower level to locate them in the area of the highest bee activity. If bee activity inside the hive is away from the strips, change strip location to where the bees swarm the most.

Do not hang the strips in very narrow aisles or in the nest peripheries, as they are not densely populated by the bees. (2)



Leave the strips in a hive for 8 weeks, then remove. It is recommended to conduct treatment in all hives of a given apiary at the same time.

Use the strips immediately after opening. Do not re-use the strips.

Do not use the product after the use-by date.

Literature:

1) Chorbirski, P.: *Eradicating Varroa mite in bees 2nd extended edition*, p. 51

Composition

Each strip contains:

Active substance: Amitraz 500 mg

Excipient: Polyethylene

White plastic strip with smooth surfaces.

Indications for use

Control of Varroa mites on bees.

Contraindications

None

Special warnings

Special warnings:

Treat all colonies in the apiary at the same time.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:

When handling the strips, use protective gloves.

Do not eat, drink, smoke when handling the product.

Avoid contact with skin and eyes when using the strips.

Wash hands with warm water and soap after use.

Avoid contact with food.

Interaction with other medicinal products and other forms of interaction:

Amitraz toxicity increases in the presence of copper salts, and its efficacy decreases in the presence of piperonyl butoxide.

Avoid using these substances simultaneously with amitraz.

Overdose:

No adverse effects have been observed after administration of a 5-fold higher doses than the recommended doses for the period of 6 weeks.

Major incompatibilities:

None known

Adverse events

None known.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. If you notice any side effects, even those not already listed in this package leaflet, or you think that the medicine has not worked, please contact, in the first instance, your veterinarian. You can also report any adverse events to the marketing authorization holder using the contact details found at the end of this leaflet, or via your national reporting system: Department for Documentation Assessment and Pharmacovigilance of Veterinary Medicinal Products, Office for Registration of Medicinal Products, Medical Devices and Biocidal Products, Al. Jerozolimskie 181C, PL-02-222 Warsaw, Tel.: +48 22 49-21-687, Fax: +48 22 49-21-605, <https://smz.ezdrowie.gov.pl>

Dosage for each target species, route(s) and method(s) of administration

The product is to be suspended inside a beehive in a dose: 2 strips/1 hive.

Advice on correct administration

Place strips in aisles between frames where bee activity is the highest. Hang the strips so as to provide free bee access from both sides, which can be done by maintaining proper distance between the frames.

Leave the strips in a hive for 6 weeks, then remove. If bee activity inside the hive is away from the strips, change strip location to place them inside the bee colony, and before

removing, leave the strips for another 2 weeks. The strips must be removed after the maximum of 8 weeks. Do not re-use the strips.

It is recommended to administer treatment in all hives at the same time.

Recommended period of treatment: after the last honey harvest (end of summer/autumn) and in spring before the first pollen harvest.

Observe the recommended treatment periods and doses.

Withdrawal period(s)

Honey – zero days.

Do not use during production of honey intended for human consumption.

Special storage precautions

Keep out of the sight and reach of children.

Store below 25 °C.

Store in the original, tightly closed container.

Shelf life after first opening the immediate packaging: use immediately.

Do not use this veterinary medicinal product after the expiry date which is stated on the label after EXP. The expiry date refers to the last day of that month.

Special precautions for disposal of the veterinary medicinal product

Medicines should not be disposed of via wastewater or household waste.

This veterinary medicinal product should not enter water courses as amitraz is toxic for fish and other aquatic organisms.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any applicable national collection systems. These measures should help to protect the environment.

Ask your veterinary surgeon how to dispose of medicines no longer required.

Pack size: 10 strips

Shelf life: 18 months

Batch expiration date: The contents of an opened package should be used immediately.

Type and composition of immediate packaging: Cardboard box containing 10 strips sealed in a PET/Aluminium/PE sachet.

For animal use only.

Prescription-only veterinary medicine.

To be administered under veterinary supervision.

Marketing authorisation number: 2085/11

SPC: 2025-01-29

