

2024-3323
2024-08-27

Formic Acid 65%

Liquid

Acaricide

For treatment of honey bee colonies infested with varroa or tracheal mites

DOMESTIC



WARNING POISON

DANGER – CORROSIVE

POTENTIAL SKIN SENSITIZER

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL BEFORE USING

ACTIVE INGREDIENT: Formic Acid....65%

REGISTRATION NO. 30108 PEST CONTROL PRODUCTS ACT

Net Contents: 4L or 20 L 65% formic acid

Vita Bee Health Canada Ltd.

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SECONDARY DISPLAY PANEL (This panel will be placed in the right side of the main panel)

Formic Acid 65% is used for treatment against varroa mites and tracheal mites in honey bee colonies. Formic Acid 65% can contribute to an IPM program by reducing varroa and tracheal mite populations.

DIRECTIONS FOR USE

Do not apply while honey supers are on the hive. Complete the treatment before adding honey supers to the hive, or remove supers from the hive before starting a treatment. In addition, for treatments conducted before placing honey supers onto the hive, allow at least two weeks between the end of treatment and the harvest of honey from the hive. Treatment may be applied in fall after the honey crop has been removed. Efficacy of formic acid is affected by ambient weather conditions (e.g., low temperatures, high humidity).

Application Precautions: For all Formic Acid 65% applications, all holes in the hive should be sealed except the bottom hive entrance, which should be fully open for the entire duration of treatment, even for applications in the late fall. Entrance reducers must be removed to prevent excessive damage to the colonies. All bee colonies in the apiary should be treated at the same time to prevent cross-infestation of colonies. Follow use directions specific to the season of use.

Formic acid is corrosive to metal. Metallic materials, either inside the hive or those which get in direct contact with formic acid may corrode. Do not place, even briefly, formic acid on metallic hive covers.

Do not use Formic Acid 65% during honey flow. To minimize residues and contamination of marketable honey, carefully follow all label instructions. Pre-Harvest Interval (PHI): Honey: at least 2 weeks from the end of the treatment in order to prevent contamination of marketable honey and off-flavour taste in honey.

For Control of Tracheal and Varroa Mites: To control varroa and tracheal mites, Formic Acid 65% is to be applied onto an absorbent material (e.g., an absorbent paper pad) placed on the bottom board or the hive top bars, at rates of 30 to 40 mL per two-story colony or 15 to 20 mL per one-story colony. Use when outside temperatures are between 10°C and 30°C, and leave hive entrances fully open. The treatment is to be repeated up to six times at 1 to 10-day intervals for the control of honey bee tracheal mites and varroa mites. Repetition of treatment at least 4 times is recommended if used as a stand-alone treatment, but fewer can be used if part of an IPM program.

For Control of Tracheal and Varroa Mites (Slow Release Method): This application method uses 250 mL of Formic Acid 65% per hive. Formic acid slow-release pads are made by placing a piece of absorbent material (e.g., fiberboard, felt) in a pin-prick perforated resealable plastic vegetable storage bag (3.8 L size). The piece of absorbent material must be of sufficient size to absorb 250 mL of Formic Acid 65%. Allow sufficient time for the 250 mL of Formic Acid 65% to soak into the absorbent material. The perforated bag containing the Formic Acid 65% soaked absorbent material must be sealed in an unperforated plastic bag for storage and/or transport. At the site while wearing acid-resistant gloves, remove the outer plastic bag, but not the perforated bag before placement on the top bars of the hive. A spacer rim may be required on the top of the brood

chamber to allow sufficient space to accommodate the pad. Leave the slow-release application in place for 21-30 days. To reduce the chance of hive injury, this application method should only be used when the varroa mite economic threshold has been exceeded, temperatures are not above 30°C. Treated colonies may have temporary suppression of population growth, from which the hive will recover following treatment.

For Detection of Varroa Mites: To detect Varroa mites, a sticky paper covered by a 3x3 mm mesh screen is to be placed on the bottom board of the hive and either 40 mL (for two-storey colonies) or 20 mL (for one-storey colonies) of a 65 percent formic acid solution is to be applied to an absorbent paper pad placed on the hive top bars. The surface of the sticky paper must be checked for fallen mites after 24 and 72 hours.

Application Directions Specific to Season of Use:

Spring and Early Fall Treatments: Use Formic Acid 65% for single or double brood-chamber honey bee colonies (bees covering 6 – 20 frames) in standard Langstroth equipment. Outside daytime temperature highs should be between 10 - 26°C at the time of application. Temperatures above 30°C during the application period may cause excessive damage to the colonies. When using the slow release method, it is highly recommended to remove the pads from the hives if temperatures above 30°C occur (e.g., when daily temperatures exceed 28°C for several days) within the first 7 days of treatment, the period during which most of the formic acid is released. Resume treatment by replacing the treatment on the hives after the end of the period of high ambient temperatures. Failure to remove formic acid from colonies during a heat wave may cause excessive brood mortality and absconding.

Up to 14 days of brood mortality may occur in the initial stage of treatment, with single brood-chamber colonies being more susceptible to damage than double brood-chamber colonies. Overall colony health should not be affected, and brood rearing should recover by the end of the treatment period. Treatment of colonies with fewer frames of bees than recommended may result in excessive brood mortality and even in colony mortality.

Late Fall, Early Winter Treatments (post-feeding, brood rearing minimal with less than half a frame of brood): Use Formic Acid 65% for single brood-chamber honeybee colonies (bees covering 5 – 10 frames), standard Langstroth equipment. Treatment of smaller hives than recommended (less than 5 frames of bees) may result in excessive colony damage, leading over-wintering mortality. Due to slower diffusion of formic acid, Formic Acid 65% is not effective on larger than single-storey hives in cooler temperatures. Outside daytime temperature highs should be above 4°C at the time of application. When using the slow release method, for temperature highs below 15°C, cut a single slit across the centre of the perforated plastic vegetable storage bag, when applying the slow-release treatment to the hive. This slit, which should face upward after the pad is applied to the hive, allows the release of formic acid from the pads in the cooler, shorter daylight conditions. Do not cut a slit if temperature highs are above 15°C.

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PRECAUTIONS:

Handlers are required to wear a long-sleeved shirt, long pants or coveralls, chemical-resistant gloves, and boots; protective eyewear (goggles or face shield) is also required for liquid/solution products.

Fatal or poisonous if swallowed. Fatal if inhaled. Irritating and corrosive to eyes and skin. Potential skin sensitizer. DO NOT get in eyes, on skin or on clothing. Avoid inhaling vapour. Known respiratory irritant. Handle in a well-ventilated area. Avoid contact with surfaces or objects made of metal. Work outdoors, stay upwind and wear cotton coveralls.

Use caution when opening the container, especially in warm weather. Have water readily available for use if eye or skin contact should occur. Wash skin thoroughly with soap and large amounts of water after handling. Remove clothing immediately if contaminated. Wash contaminated clothing separately from household laundry. Do not contaminate water supply, ponds, lakes or streams with the product.

FIRST AID:

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

STORAGE:

Store product in original container in a cool, dry and well-ventilated area away from sulphuric acid, oxidizing agents, and sources of ignition. Avoid heat, sparks, and open flames. Use caution when opening the container, especially in warm weather.

Store this product away from food or feed. Do not eat, drink or smoke in areas of use and storage.

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DISPOSAL:

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

Ventilate perforated pouches containing used pads on site, protected from precipitation, for two weeks prior to disposal via landfill or incineration. Open burning is prohibited.

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.