

Virosoft CP4™

Effective Date
January 30, 2017

According to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

1- Product Identification

- Commercial name: Virosoft CP4™
- Active ingredient : Cydia Pomonella granulosis virus - Strain CMVG4
- Recommended use: Biological control of codling moth and oriental fruit moth larvae on tree fruits and nuts crops.
- Restrictions on use: none
- Canada Pest Management Regulatory Agency (PMRA):
Registration No.: 26533
- US Environmental Protection Agency (EPA):
Product Registration No.: 72898 - 2
Establishment Registration No.: 72898 - CDN – 001
- Product Supplier:
 - Name: BioTepp inc.
 - Address: 100, Fisher
Mont-St-Hilaire (Quebec)
J3G 4S6
Canada
 - Website: <http://www.biotepp.com/>
- Emergency Call: 514-910-9771 or 418-955-6109

2- Hazard Identification

- Hazard classification: Registered as reduced risk pesticide under NAFTA Joint Reviews of Pesticides
- Label in Canada According to Pest Management Regulatory Agency (PMRA)
- Label in US According to Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) FIFRA 40 CFR 156.10

3- Product Composition / Information on ingredients

- Codling moth Granulovirus from the North American Ecozone 4.
- Cell debris including proteins, fatty acids, sugars and ions.
- Intestinal insect bacteria and fungi from insect rearing.
- Sodium chloride CAS-7647-14-5
- Water.

4- First-aid measures

- No typical symptoms and effects known.
- **Inhalation:** No effects have been found in animal studies or have been reported from human exposure. This is only possible by exposure to HOT product. Move to fresh air, rest, half upright position, loosen clothing. Seek medical advice after significant exposure.
- **Skin:** Remove contaminated clothing immediately and rinse skin with plenty of water for 15 - 20 minutes. If irritation or sensitization occurs and persists, seek medical attention.
- **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. If irritation or sensitization occurs and persists, seek medical attention.
- **Ingestion:** Small amounts swallowed incidentally to industrial handling are not likely to cause injury. Rinse mouth with water.

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

5- Fire-Fighting Measures

- Flash point: not applicable.
- Extinguishing media: use extinguishing media appropriate for controlling the surrounding fire.
- Special methods for fire prevention: none.
- Special protective equipment and precautions for fire-fighters: none.

6- Accidental Release Measures

- Personal precautions: Usual precautions for handling chemicals.
- Environmental precautions: No specific recommendation.
- Methods for cleaning up: Collect if possible for reuse or disposal. Hose area with water. Do not contaminate food or feedstuff.

7- Handling and Storage

- Incompatible materials: None.
- Keep away from children, food and feedstuff.
- Avoid contact with skin, eyes and clothing.
- Store product away from direct sunlight.
- Product is sent in a frozen suspension, ready to be mixed.
- Upon reception, the best condition to insure its stability and morbidity strength is to keep it frozen.
- For long-term storage, product is best kept frozen.
- For short-term storage product can be stored refrigerated.
- Keep open bottles refrigerated or frozen.
- May cause sensitization.

8- Protective Measure:

- Baculoviruses are known to be safe to humans and mammals.
- Exposure limits: No exposure limit has been established
- Personal Protection: Measures would apply to insect debris and are prescribed by law to be overalls, waterproof gloves, shoes plus socks, and protective eyewear, goggles, or a protective face shield.
- Do not enter or allow worker entry into treated areas during the Restricted Entry Interval (REI) of 4 hours.

9- Physical and Chemical Properties

- Appearance: liquid (20°C)
- Odor: slight
- Odor threshold: not determined
- pH range: 5.5 – 7.5
- Freezing / Melting point range: -5°C to 0 °C
- Boiling point range: 100°C to 105 °C
- Flash point: > 100°C
- Evaporation rate: same as water
- Flammability: not determined
- Vapor pressure : < 0.1 Pa (20°C)
- Vapor density: not relevant
- Density : 1,1 kg/l (20°C)
- Solubility in water: soluble
- Solubility in other solvents: not determined

- Partition coefficient n-Octanol/water: not determined
- Auto-ignition temperature: not determined
- Explosion properties: not determined
- Oxidizing properties: not determined
- Viscosity : 1,8 10⁻³ Pa-s

10- Stability and reactivity

- Reactivity: Not reactive.
- Chemical stability: No decomposition if stored and handled properly.
- Biological stability: Baculoviruses occur naturally in the environment, including on the surfaces of fruits, vegetables, crops, plants in general, and in the soil. They can be destroyed by direct exposure to sunlight but are otherwise resistant to freezing and draught.
- Hazardous reactions: The same as water.
- Condition to avoid: Heat level to affect HDPE container.
- Incompatible materials: None.
- Hasardous decomposition products: None.

11- Toxicological Information

- Eye: Acute toxicity not expected on published literature.
- Skin reaction: Acute toxicity not expected on published literature.
- Ingestion: Acute toxicity not expected on published literature.
- Inhalation: Acute toxicity not expected on published literature.
- No other information on adverse health effects as chronic, cancer, birth, reproductive, mutagenic.

12- Ecological Information

- Ecotoxicity to non-targeted organisms :
 - bees: none expected based on published literature.
 - parasitoids: none expected based on published literature.
 - invertebrates: none expected based on published literature.
 - fish: none expected based on published literature.
 - birds: none expected based on published literature.
 - mammals: none expected based on published literature.
 - other insects: none expected based on published literature.
- Persistence, degradability: Baculoviruses occur naturally in the environment, including on the surfaces of fruits, vegetables, crops, plants in general, and in the soil. Degradation under artificial or natural UV light (sunlight) exposure. Resistant to freezing and draught. Biodegradable.
- Bioaccumulative potential: Bioaccumulation non-expected.
- Mobility in soils: Leaching with water through top soil layers. Very limited capacity to persist and reach lower layers.
- No other adverse effects expected.

13- Disposal Considerations

- Storage
 - Preferably store the product in original container, in a freezer.
 - Store any defrosted product in original container, in a refrigerator.
 - For immediate use of defrosted product, store in original container in a cool, dry place, inaccessible to non-authorized persons and to pets.
 - Bioactivity may be impaired by temperatures above 30°C.

- Disposal
 - Triple rinse or pressure-rinse the empty container. Add the rinsing to the spray mixture in the tank. Follow local, provincial or state instructions for any required additional cleaning of the container prior to its disposal.
 - Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements.
 - For disposal of unused or unwanted product, bring remaining product within its container to a waste disposal facility or pesticide disposal program.
- Contact the local, provincial or state regulatory agency in case of a spill and for clean-up of spills

14- Transportation Information

- Not restricted. Not regulated by land, sea or air transport regulations.
- No special requirements other than avoidance of temperatures above 20°C (68°F).

15- Regulatory Information

- This product is a bio-pesticide product registered under The United States Environmental Protection Agency (USEPA) and under the Health Canada Pest Management Regulatory Agency (PMRA).
- This product is subject to specific labeling requirements under these agencies.
- These requirements are different from the information required for this Safety data Sheet.
- Read hazard information on the product label as well as other important information on directions on storage and use.

16- Other Information

- **Disclaimer:** To the best of our knowledge the information contained herein is accurate. However, BioTepp inc. does not assume any liability whatsoever for the accuracy or completeness of this information. Final determination of suitability of the information is the sole responsibility of the user. All material may present unknown health or environmental hazards and should be used with caution. Although certain hazards are described herein, BioTepp does not guarantee that they are the only hazards which exist.
- Revision Date: February 1st 2017
- SDS prepared : BioTep inc.