

Carpovirusine

Date of Issue: 22 December 2005

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): 265 g/litre *Cydia pomonella* granulosis virus equivalent to 1×10^{13} GV in the form of a suspension concentrate.

Recommended use: Biological control of Codling moth in Apples and Pears.

Supplier: Elliott Technologies Limited
45 Kitchener Road
Pukekohe
Phone 0800 100 325

Emergency telephone number: 0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: Toxic - 6.5B,
Ecotoxic - 9.1D

Required identification Details: **WARNING**
KEEP OUT OF REACH OF CHILDREN

Harmful - May cause sensitisation from prolonged skin contact.
Designed for biocidal action against Codling moth

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
<i>Cydia pomonella</i> granulosis virus	None	26.5 %

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Effects and symptoms May cause sensitization by skin contact
First-aid measures

Inhalation: Immediately remove to fresh air. Call a physician immediately.

Ingestion: Call a physician immediately and show the label. Do not induce vomiting.

Skin contact:	Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water.
Eye contact:	Rinse immediately and thoroughly with plenty of water during at least 10 to 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if pain or redness persists.
Notes to a physician:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:	2X
Extinguishing media :	Water spray, foam, carbon dioxide, dry chemical powder.
Hazardous thermal (de)composition products:	By thermic decomposition, possibility of formation of toxic gases (sulfur oxide, phosphorus oxide, nitrogen oxide, carbon oxide).
Protection of fire-fighters:	Intervention personnel should wear mask and individual respiratory equipment. Retain water or extinguishing media and eliminate safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear appropriate protective clothes, gloves and glasses.
Environmental precautions:	Retain spilled liquids and collect them with sand or other absorbent inert material (sepiolite). Absorbent inert material stocks have to be sufficient to face reasonably predictable spillage. Keep sewers from potential spillage to minimize pollution hazards. Do not throw washing waters into sewers. Contact competent authorities when a situation cannot be controlled rapidly and efficiently. In the case of spillage into water, stop dispersion of the product with adequate barrier.
Methods for cleaning up:	Collect contaminated products on the surface concerned, transfer to closed drums before sending in a specialized incineration treatment center. Wash the contaminated surface with water and collect washing waters for treatment. Cover the contaminated zone using absorbent materials such as sand or sepiolite.

7. HANDLING AND STORAGE

Handling:	Do not eat, drink or smoke when using. Wear appropriate protective clothes, adequate gloves, glasses or masks. Avoid prolonged or frequent contact of skin with new or old product. Respect good hygienic body conditions and cleanliness of the working area. Wash hands abundantly after handling. Do not wash working clothes with household linen.
Storage:	To prevent fires and explosions : rags soaked with product,

paper, or materials used to absorb spillage may cause fire. Avoid accumulation of these rags. Eliminate them safely immediately after using.

Store the product in its original container in the fridge (4°C) for a use within 8 months after formulation date. For a 2 years shelf life, it is necessary to freeze the product. Store away from heat and sources of fire at temperature <35°C. Keep away from food, drink and animal feed stuffs.

Packaging materials: 1 Litre HDPE plastic jerry can.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Workplace exposure standards: No exposure limits have been established for this material.

Exposure Standards outside: No exposure limits have been established for this material.

The workplace:

Engineering measures

Exposure control measures: Follow normal precautions for use of an agrichemical

Personal Protective Equipment

Detail specifications for equipment:

Respiratory system: Preferably wear a mask covering all face with filter appropriate to dust and aerosol.

Skin and body: Wear appropriate, and if possible disposable, clothes.

Hands: Wear single-use gloves of good quality.

Eyes: Preferably wear a screen face or protective glasses.

General hygiene: Wash hands and exposed skin after work and before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Red viscous liquid.
Colour: Red viscous liquid
Odour: No specific odour
pH: 4,5
Vapour Pressure: N/A
Vapour Density: N/A
Boiling Point: Not available
Freezing/melting point: N/A
Solubility: Miscible with water in all proportions. Gives stable emulsion.
Specific gravity or density: 1,020 ± 0,01
Information for flammable material including: Not Flammable.
Auto – ignition Temperature: N/A
Octanol/water partition coefficient: N/A
Explosion properties: Not Explosive
Oxidation properties: Not an oxidiser

10. STABILITY AND REACTIVITY

Stability:**Conditions to avoid:**

Do not store the product at room temperature or higher since this accelerate the degradation of the compound.

Materials to avoid:

Avoid contact with strong oxidant and strong acids and basis.

Hazardous decomposition Products:

By thermic decomposition, possibility of formation of toxic gases (sulfur oxide, phosphorus oxide, nitrogen oxide, carbon oxide)

Hazardous polymerization:

None

Specific Data:**Hazardous reactions :**

None

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral :

LD 50 rat : > 2000 mg/kg

Acute toxicity - Dermal :

Acute poisoning hazard by skin contact is highly improbable due to the properties of the virus (enclosed in inclusion bodies, easily damaged by sunlight) and of the preparation (no aqueous concentrate basis containing organic solvents and inducing transcutaneous route)

Acute toxicity – Inhalation:

Not available.

Skin irritation :

Not irritating to skin.

Eye irritation:

Slightly irritating to eyes.

Sensitization :

Sensitizing to skin.

Common name :

Cydia pomonella granulosis virus

Chronic toxicity**Carcinogenicity:**

Not carcinogenic

Mutagenicity:

Not Mutagenic

Reproduction toxicity:

Not a reproductive toxin.

Other information :

12. ECOLOGICAL INFORMATION

Ecotoxicity

Cydia pomonella granulosis virus is naturally present in the environment. After field use, the virus disappears or reaches an equilibrium near the one it had before the application, due to its instability to climatic conditions (temperature and sunlight) in a few weeks.

Fish

CL50(96 h), *Brachydanio rerio* : >250 mg/l

Daphnia magna

CE50 (48 h), *Daphnia magna* : >250 mg/l

Bees

Not toxic to bees

Mobility Soil

Not mobile in soil

Water

Not

Persistence/degradability Soil

Not persistent in the environment

Bioaccumulative potential :

Not a bioaccumulator

Birds

No observed effect level, *Colinus virginianus* :
10 000 mg/kg/day during 5 days.

13. DISPOSAL CONSIDERATIONS

Methods of disposal :

Eliminate the product and its packaging with care and in a responsible way. Do not throw near ponds, rivers, ditches or into sewers. Wash contaminated surfaces with water and collect washing waters for treatment. Discharges can be neutralized in acid media or with soda before sending to land fill. Make sure that local regulations are respected.

14. TRANSPORT INFORMATION**International transport regulations****UN number:**

This material is not a dangerous good as defined by the International Maritime Dangerous Goods Code and the International Air Transport Association Dangerous Goods Regulations.

Class or Division:

N/A

Classification Code:

N/A

Packing Group:

III

Marine Pollutant:

No

Proper shipping name :

N/A

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

This material is not a dangerous good as defined by the International Air Transport Association Dangerous Goods Regulations.

15. REGULATORY INFORMATION**ACVM Registered Number:**

P7291

HSNO Approval Code:

HSR000109

16. OTHER INFORMATION**Additional information:**

Original Issue Date: 22 December 2005

Revision Date: N/A

Replaces: N/A

Disclaimer: PLEASE READ

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