

## Virex™

### Section 1: Identification of the Substance or Mixture and of the Supplier

<b>Product name:</b>	Virex
<b>Recommended use:</b>	Biological insecticide.
<b>Company details:</b>	Grochem (AgriNova New Zealand Limited) 15 Sunlight Grove Porirua New Zealand
<b>Telephone:</b>	+64 4 237 0905
<b>Email:</b>	grochem@grochem.com
<b>Emergency telephone:</b>	New Zealand 0800 CHEMCALL – 24 hours (0800 243 6225)  Australia 1800 127 406 Other locations +64 4 917 9888  or The National Poisons Centre 0800 POISON (0800 764 766)
<b>Date of preparation:</b>	23 January 2014

### Section 2: Hazards Identification

<b>Dangerous Goods (Transport):</b>	Not a Dangerous Good under the Land Transport Rule: Dangerous Goods 2005.
<b>Hazardous substances (HSNO):</b>	9.1D (Biocidal – Virex is a low hazard targeted insecticide however information on effect to non-target species is incomplete).

### Section 3: Composition/Information on Ingredients

**Classification & type: Pure substance**

Material	CAS No.	Proportion (%w)
Cydia pomonella granulovirus	-	0.7g/L
Non-hazardous components	-	to 100%

## Section 4: First Aid Measures

<b>Symptoms of exposure:</b>	No adverse health effects expected if the product is handled in accordance with this SDS and the product label. Symptoms that may arise if the product is mishandled are:
Symptoms and effects	No typical symptoms and effects known.
<b>First aid actions:</b>	In all cases of doubt, or when symptoms persist, seek medical attention.
If Swallowed	Wash out mouth with water. For advice, contact the National Poisons Centre 0800 POISON (0800 764766).
If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
If on Skin	Remove and wash contaminated clothing. If skin irritation occurs, get medical advice.
If Inhaled	Move to fresh air, rest, half upright position, loosen clothing. Oxygen or artificial respiration if there is difficulty in breathing. Seek medical advice after significant exposure. Symptomatic treatment is advised.
<b>Workplace facilities:</b>	Eyewash facilities should be available.
<b>Notes for medical personnel:</b>	Treat symptomatically.

## Section 5: Fire Fighting Measures

<b>Type of Hazard:</b>	Vapours cause coughing. At elevated temperatures there is a risk of exothermic polymerization (>200°C).
<b>HAZCHEM code:</b>	N/A
<b>Combustion products:</b>	At temperatures > 280 °C, Acrolein may be formed.
<b>Extinguishing media &amp; methods:</b>	Water mist, alcohol resistant foam, dry powder, carbon dioxide. Do not use water jet or foam. Cool closed containers with water. Contain effluent and prevent entry to drains and waterways.
<b>Recommended protective clothing:</b>	Firefighters should wear full protective clothing and self-contained breathing apparatus.

## Section 6: Accidental Release Measures

<b>Personal protection:</b>	See Section 8.3 for appropriate PPE.
<b>Containment and clean up:</b>	Collect spillage and reuse or dispose of collected material at an approved landfill. Contain effluent and prevent entry to drains and waterways.
<b>Special requirements:</b>	See Section 13 for instructions for the disposal of waste/contaminated material.

## Section 7: Handling and Storage

<b>Subsection 1:</b>	<b>Handling</b>
Handling practices	Wear appropriate PPE as detailed in Section 8.3.
<b>Subsection 2:</b>	<b>Storage</b>
Site requirements	Virex can be stored in the refrigerator ( $\leq 5^{\circ}\text{C}$ ) for at least one year. At ambient temperature Virex will be stable for approximately 1 month. Separate from foodstuffs.
Packaging	Store product in the closed, original container.

## Section 8: Exposure Controls/Personal Protection

<b>Subsection 1:</b>	<b>Workplace Exposure Guidelines (may also be considered in section 2)</b>
Workplace exposure standards	No exposure standards have been set for this substance.
<b>Subsection 2:</b>	<b>Engineering Controls</b>
Exposure control measures	Use in a well ventilated area. Wear appropriate PPE and avoid contact.
<b>Subsection 3:</b>	<b>Personal Protective Equipment (PPE)</b>
General hygiene	Use good personal hygiene. Wash hands after handling.

## Section 9: Physical and Chemical Properties

<b>Appearance</b>	Grey/brown liquid	<b>pH</b>	6-7
<b>Odour</b>	Not known	<b>Boiling point (degC)</b>	>100
<b>Specific gravity (kg/L)</b>	1.1	<b>Freezing point (degC)</b>	Not available
<b>Solubility</b>	Soluble	<b>Flashpoint (degC)</b>	>100°C

## Section 10: Stability and Reactivity

<b>Stability of substance:</b>	Stable under normal conditions. Risk of decomposition and polymerization at higher temperatures.
<b>Conditions to avoid:</b>	High temperature.
<b>Material to avoid:</b>	Avoid contact with oxidizing agents.
<b>Hazardous decomposition products:</b>	At temperatures > 280 °C, Acrolein may be formed.
<b>Hazardous polymerization:</b>	At elevated temperatures there is a risk of exothermic polymerization (>200 °C).

## Section 11: Toxicological Information

<b>Data and interpretation:</b>	Oral LD50 >12,600 mg/kg (rat). See Section 2 for general hazard information.
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## Section 12: Ecological Information

### Potential Environmental Interactions:

Ecotoxicity	Fish: 96h LC50: > 5000 mg/l (Lit.) Algae: 48h EC50: > 2900 mg/l (Lit.) Bacteria: 72h IC50: >> 10'000 mg/l (Lit.)
Fate	Degradation Biotic: Biodegradable.

**Section 13: Disposal Considerations**

<b>Product disposal:</b>	Use as directed on the label or at dispose of at an approved facility.
<b>Container disposal:</b>	Rinse and recycle or bury at an approved landfill.

**Section 14: Transport Information**

<b>UN Number:</b>	N/A
<b>DG Class and Subsidiary Group:</b>	N/A
<b>Proper shipping name:</b>	N/A
<b>Packing group:</b>	N/A
<b>HAZCHEM code:</b>	N/A
<b>Special precautions:</b>	None.

**Section 15: Regulatory Information**

<b>Regulatory status:</b>	Approved Pursuant to the HSNO Act 1996 HSR00809. See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for approval conditions.
<b>HSNO Controls:</b>	Trigger quantities for this substance:
SDS must be available for	50L
Signage	10,000L
Emergency plan/Bunding	10,000L

**Section 16: Other Information**

<b>Revision due:</b>	23 January 2019
<b>Additional information:</b>	Directions for use are found on the product label.
<b>Glossary:</b>	
CAS	Chemical Abstract Services Number, used to uniquely identify chemical compounds
HSNO	Hazardous Substances and New Organisms (legislation 1996)
LD50	Lethal Dose fatal to 50% of test animals/organisms
PPE	Personal Protective Equipment

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Grochem, it is the user's responsibility to determine conditions of safe use of the product.