



MATERIAL SAFETY DATA SHEET

MADEX HP

According to the standards and regulatory requirements of the United States and GHS

Last review
08Feb13

1. PRODUCT AND COMPANY IDENTIFICATION

Product label name:	MADEX HP
Product use:	Biological insecticide for control of codling moth and Oriental fruit moth
Manufacturer:	Andermatt Biocontrol AG Stahlermatten 6 6146 Grossdietwil Switzerland sales@biocontrol.ch
Emergency number:	1-800-222-1222 (National Poison Control Hotline)

2. HAZARDS IDENTIFICATION

This product is intended for use as an insecticide on pome and stone fruit trees. This product should pose no health concerns through normal use in accordance with label directions.

Signal Word:	Caution
Potential Health Effects	None documented

3. COMPOSITION/INFORMATION ON INGREDIENTS

<i>Cydia pomonella</i> granulovirus isolate V22	Contains a minimum of 3×10^{13} viral occlusion bodies per liter
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4. FIRST AID MEASURES

Symptoms and effects	No typical symptoms and effects known.
First aid General	In all cases of doubt, or when symptoms persist, seek medical attention. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222 for emergency medical treatment information.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Skin	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
Eye	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. Call a poison control center or doctor for treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

5. FIRE-FIGHTING MEASURES

Extinguishing media	Water mist, alcohol resistant foam, dry powder, carbon dioxide.
Unsuitable extinguishing media	Water-jet, foam.
Special exposure hazards	Vapors cause coughing.
Hazardous decomposition / combustion products	At elevated temperatures there is a risk of exothermic polymerization ($>390^{\circ}\text{F}$ / 200°C). At temperatures $> 530^{\circ}\text{F}$ / 280°C , Acrolein may be formed.
Protective equipment	No specific recommendations.
Other information	Avoid contact with oxidizing agents. Cool closed containers with water.



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6. ACCIDENTAL RELEASE MEASURES

Personal precautions	The usual precautions for handling chemicals should be observed.
Environmental precautions	No specific recommendations.
Methods for clean up	Collect as much as possible; in a clean container for (preferable) reuse or disposal.
Other information	For personal protection see section 8.

7. HANDLING AND STORAGE

Handling	Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170.
Storage requirements	Store this product in original sealed container in a cool, dry place inaccessible to children and pets.
Other information	To maintain quality: Store below 41°F (5°C). Avoid elevated temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	The usual precautionary measures for handling chemicals should be observed.
Exposure limit	No exposure limit has been established.
Personal protective equipment (PPE)	Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170
Respiratory	No specific recommendations.
Hands	Use of waterproof gloves is recommended when handling.
Eyes	Use of safety glasses or goggles is recommended when handling.
Skin and body	Use of long-sleeved shirt, long pants and shoes plus socks is recommended when handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical form	Liquid (68°F / 20°C)
Odor	Odorless
pH value	6-7
Melting point / freezing point	Not determined (does not freeze at -0.4°F / -18°C)
Color	Grey-brown
Boiling point/range	39-143°F (103-290 °C)
Flash point	> 200°F (> 100 °C)
Evaporation rate	Not determined
Flammability	Not determined
Vapor pressure	< 0.1 Pa (68°F / 20°C)
Vapor density	Not relevant
Density	Approx. 1100 kg/m ³ (68°F / 20°C)
Relative vapor density (air=1)	Not determined
Solubility in water	Soluble
Solubility in other solvents	Not determined
Viscosity	833 mPa x s
Explosion or oxidizing properties	None known

10. STABILITY AND REACTIVITY

Reactivity	Not reactive.
Stability	No decomposition if stored and handled properly.
Conditions to avoid	Temperature > 390°F (>200 °C) (polymerization, decomposes).
Materials to avoid	Avoid contact with oxidizing agents.
Hazardous decomposition products	Acrolein (> 530°F / >280 °C)

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Oral LD50: > 5 x 10 ⁹ PIB/kg b.w. (rat) (Lit.)
Skin corrosion/irritation	Based on available data, not classified.
Serious eye damage/irritation	Based on available data, non-irritating.
Respiratory or skin sensitization	Based on available data, non-sensitizing.
Carcinogenicity	Based on available data, not classified.
Reproductive toxicity	Based on available data, not classified.
STOT-single exposure	Based on available data, not existing.
STOT-repeated exposure	Based on available data, not existing.
Aspiration hazard	Not relevant.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish (<i>Oncorhynchus mykiss</i>)	96h LC50: > 100 mg product/L
Aquatic invertebrate (<i>Daphnia magna</i>)	48h EC50: > 100 mg product/L
Algae (<i>Scenedesmus subspicatus</i>)	72h EC50: > 100 mg product/L
Aquatic plant (<i>Lemna gibba</i>)	7d EC50: > 100 mg product/L

Fate

Degradation, biotic	Biodegradable.
Bioaccumulative potential	Not persistent, not bio-accumulated.
Mobility in soil	Potential absorptiveness in the top organic soil layers and very little capacity to leach to lower layers.
Additional ecological information	Do not directly apply to water.

13. DISPOSAL CONSIDERATIONS

Product disposal	According to local regulations, offer remaining product to a waste disposal facility or pesticide disposal program. Do not contaminate water, food or feed by disposal.
Contaminated packaging	According to local regulations.

14. TRANSPORT INFORMATION

DOT shipping	Not DOT regulated		
Land transport			
ADR class	Not restricted	ADR item number	Not relevant
RID class	Not restricted	RID item number	Not relevant
Hazard identification no.	Not relevant	Substance identification no.	Not relevant
TREM – Card	Not relevant	UN Number	Not relevant
Proper shipping name	Not relevant	National regulations	
Sea transport			
IMO/IMDG code	Not restricted	Class	Not restricted
Packing group	Not relevant	UN number	None
EMS	Not relevant	MFAG	Not relevant
Marine pollutant	No	Proper shipping name	Not relevant
Air transport			
ICAO-TI/IATA-DGR		UN number	None
Class	Not restricted	Packing group	Not relevant
Proper shipping name	Not relevant		



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15. REGULATORY INFORMATION

EPA Reg. No. 69553-1
EPA Est. No. 70051-CA-001

In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

16. OTHER INFORMATION

This information only concerns the above-mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith, but without warranty. It remains the user's responsibility to make sure that the information is appropriate and complete for his/her special use of this product.

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Composed by Philip Kessler