

**MATERIAL SAFETY DATA SHEET**

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**1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

GENERAL USE: Biological Insecticide

COMMON NAME: NemaShield HB

MANUFACTURED FOR:

EMERGENCY TELEPHONE NUMBER:

BioWorks, Inc.  
100 Rawson Rd, Suite 205  
Victor, NY 14564

**BioWorks, Inc:** 800-877-9443  
**CHEMTREC:** 800-424-9300

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**2. COMPOSITION, INFORMATION ON INGREDIENTS**

DESCRIPTION: Formulation of larvae of the insect parasitic nematode *Heterorhabditis bacteriophora* (50 or 500 million) with inert carrier

COMPONENTS: Nematode larvae, inert carrier

ADDITIONAL INFORMATION: Contains no hazardous chemical substances present on Annex I of Directive 67/548/EC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.

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**3. HAZARDS IDENTIFICATION**

POTENTIAL HEALTH EFFECTS: None expected, see section II

CHRONIC: No known effects.

CARCINOGENICITY: The ingredients in this product are not listed by NTP, OSHA, or IARC as a carcinogen.

ADDITIONAL INFORMATION: *H. bacteriophora* can be found as living organism in the environment.

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**4. EMERGENCY AND FIRST AID MEASURES**

INHALATION: Supply fresh air. Keep patient warm. Consult doctor if symptoms persist.

SKIN CONTACT: Wash with water and soap and rinse thoroughly. Get medical attention if irritation develops and persists.

EYE CONTACT: Rinse opened eye for several minutes (~15 min.) under running water. If symptoms persist, consult doctor.

INGESTION: In case of persistent symptoms consult a doctor.

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## 5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable.

AUTOIGNITION TEMPERATURE: Not determined

EXTINGUISHING MEDIA: Not combustible.

SPECIAL FIRE-FIGHTING PROCEDURES: Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus and full protective equipment.

UNUSUAL FIRE and EXPLOSION HAZARDS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: None

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## 6. ACCIDENTAL RELEASE MEASURES

GENERAL: Take all additional action necessary to prevent and remedy the adverse effects of the spill. This product should be prevented from entering bodies of water.

SPECIFIC: In case of spill, collect material immediately. Wipe residual material from surfaces with cloth. Do not wash residues into drains or other waterways.

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## 7. HANDLING and STORAGE

Prevent formation of dust. Keep away from heat and direct sunlight.

Store in original container under refrigerated conditions, (36-43F) Do not freeze. Do not store near food or feed commodities. Keep container tightly closed when not in use.

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## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with skin and eyes. Keep container tightly closed.

PERSONAL PROTECTION:

RESPIRATORY: Do not inhale dust.

OTHER: Wash thoroughly with soap and water after handling.

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## 9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE: grey powder  
VAPOR PRESSURE: Not applicable  
SPECIFIC GRAVITY: Data not available  
SOLUBILITY in water: 99%

ODOR: earthy odor  
MELTING POINT: Not applicable  
BOILING POINT: Not applicable  
VISCOSITY: Not determined  
Ph(10g/l at 20C) 7.5-8.0

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## 10. STABILITY and REACTIVITY

STABILITY: Stable under normal recommended storage and handling conditions. (see section 7)

INCOMPATIBILITY: Oxidizing agents

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION:  
Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

Active ingredient is practically non-toxic, non-allergenic and non-pathogenic to mammals. Pre-existing medical conditions should not be aggravated by exposure.

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## 12. ECOLOGICAL INFORMATION

FISH TOXICITY: No data available.

DAPHNIA MAGNA TOXICITY: No data available.

ALGAE: No data available

OTHER: *Heterorhabditis* spp. are nematodes restricted to soil and parasitic to subterranean Coleoptera, Diptera, Lepidoptera and Orthoptera.

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## 13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: Do not contaminate food or feed by disposal. Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Dispose of empty packaging in a sanitary landfill or by incineration.

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## 14. TRANSPORT INFORMATION (not meant to be all inclusive)

D.O.T.- Land, air and sea

PROPER SHIPPING NAME: Not regulated

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## 15. REGULATORY INFORMATION (not meant to be all inclusive)

### UNITED STATES

SARA Hazard Class: [ ] Acute [ ] Chronic [ ] Flammable [ ] Pressure [ ] Reactive  
[X] None

SARA 313 [ ] Yes [X] No, Chemical

SARA 302 [ ] Yes [No], Chemical

CERCLA: [ ] Yes [No], Chemical

RQ: none

RCRA: [ ] Yes [No]

NFPA Hazard Rating:

NFPA Hazard Rating Scale:

Health: [0]

0 = Minimal

3 = Serious

Fire: [0]

1 = Slight

4 = Severe

Reactivity: [0]

2 = Moderate

Special: [0]

HMIS Codes:

HMIS Hazard Rating Scale:

Health: [0]

0 = Minimal

3 = Serious

Fire: [0]

1 = Slight

4 = Severe

Reactivity: [0]

2 = Moderate

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16. OTHER INFORMATION

MSDS SUMMARY: MSDS created November 14, 2008

CONTACT: BioWorks, Inc.

TELEPHONE: 800-877-9443

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Victor, NY 14564

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