

# Material Safety Data Sheet

## *Thuricide*

Date issued: 10/22/2010 (m/d/y)

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Thuricide

Norac Concepts Inc.  
P.O. Box 31097, Guelph, ON N1H 8K1  
519-821-3633

Emergency telephone number: All hours, 613-787-5620, **ONLY** for health and environmental information.

Supplier: Thermo Trilogy Corporation  
9145 Guilford Road Suite 175  
Columbia, MD 21046-1883

In case of emergency, call Chem: 1-800-255-3924  
outside North America, call collect: 1-813-248-0573

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients	% (w/w)	ACGIH TLV	CAS No.
<i>Bacillus thuringiensis</i>	0.8%	Not established	68038-71-1
Solvent	N/A	10 mg/m <sup>3</sup>	N/A
Surfactant	N/A	Not established	N/A
Sodium sulphate	N/A	1000 ppm	7757-82-6

Synonyms: None.

Active ingredient: *Bacillus thuringiensis*.

Chemical family: Biological insecticide.

Product use: Agricultural insecticide.

Registration number: 11302 Pest Control Products Act.

### 3. HAZARDS IDENTIFICATION

**Summary:** Hazardous properties of all ingredients have been considered in the preparation of this MSDS. Read the entire MSDS for the complete hazard evaluation of this product.

**Emergency overview:** Exposure may result in eye irritation. A skin sensitization (allergic) reaction may occur in sensitive individuals.

### 4. FIRST AID MEASURES

**Inhalation:** Move victim to fresh air. Give artificial respiration **ONLY** if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing **AND** no pulse. Obtain medical advice **IMMEDIATELY**.

**Skin contact:** Flush skin with running water for a minimum of 20 minutes. Start flushing while removing contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention **IMMEDIATELY**.

**Eye contact:** Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention **IMMEDIATELY**.

**Ingestion:** If victim is alert and not convulsing, rinse mouth out and give 200-300 mL (1 cup) of water to dilute material. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. Obtain medical attention **IMMEDIATELY**.

**Note to Physician:** There is no specific antidote if this product is ingested. If a large amount has been ingested and emesis is inadequate, lavage stomach. Treat symptomatically.

## 5. FIRE AND EXPLOSION HAZARD DATA

**Flash point:** Not available.

**Autoignition temperature:** No data.

**Flammable limits (lower):** No data.

**Flammable limits (upper):** No data.

**Extinguishing media:** For large fires, apply aqueous film forming foam or water in the form of a fog. For small fires, use carbon dioxide or dry chemical.

**Fire-fighting procedures:** Wear self-contained breathing apparatus and impervious clothing. Minimize the amount of water used and contain the run-off from entering water supplies or the environment by dyking.

**Other fire and explosion hazards:** None.

## 6. ACCIDENTAL RELEASE MEASURES

**Spills, leaks or releases:** Wear personal protective equipment. For release to land, stop any further release and spread of contamination and absorb spilled material with a suitable absorbent. Wash hard surfaces with detergent and water, then absorb with suitable absorbent. For release to water, stop any further release and utilize damming and/or water diversion to minimize the spread of contamination. Collect the spilled material, any contaminated soil, water and absorbent, then place in a waste container for proper disposal. Notify applicable government authority if release is reportable or could adversely affect the environment.

**Deactivating chemicals:** None.

## 7. HANDLING AND STORAGE INFORMATION

**Handling procedures:** Use only with adequate ventilation and avoid contact with eyes, skin and clothing. Wear appropriate personal protective equipment. Wash thoroughly after use. If clothing becomes contaminated, wash thoroughly before re-use. Spilled material maybe slippery; clean up spills immediately before walking in spill area.

**Storage requirements:** Store in a cool, dry and well-ventilated area. Keep away from heat, sparks and flame. Keep containers closed. Keep out of reach of children and pets.

**Storage temperature:** Protect from freezing. Do not expose sealed containers to temperatures above 40°C.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eye protection:** Chemical safety goggles.

**Skin protection:** Chemical resistant gloves and protective clothing should be impervious under conditions of use.

**Respiratory protection:** If misting conditions exist, use NIOSH/MSHA approved respirator for organic vapours.

**Other protective equipment:** Eye wash station.

**Engineering controls:** Provide local exhaust or ventilation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Green liquid.

**Odour:** Slight fish odour.

**Specific gravity:** 1.01.

**Boiling point:** Not available.

**Melting point:** Not available.

**Solubility (water):** Soluble.

**Solubility (other):** No data.

**pH:** 4.8 to 5.2.

**% volatile:** Not available.

**Evaporation rate (ether=1):** No data.

**Vapour pressure (mm Hg at 20°C):** No data.

**Vapour density (air=1):** No data.

## 10. STABILITY AND REACTIVITY DATA

**Chemical stability:** Stable.

**Hazardous polymerization:** Will not occur.  
**Conditions to avoid:** None known.  
**Incompatibility with other substances:** None known.  
**Hazardous decomposition products:** None known.

## 11. TOXICOLOGICAL INFORMATION

**Summary:** Exposure may result in eye irritation. A skin sensitization (allergic) reaction may occur in sensitive individuals.

### Toxicological data

#### *Bacillus thuringiensis*

Oral LD<sub>50</sub> (rat) = > 7.2E + 10 CFU/kg  
Dermal LD<sub>50</sub> (guinea pig) = > 1.8E + 7 CFU/kg  
Inhalation LC<sub>50</sub> (mouse) = > 3.3E + 9 CFU/L

**Inhalation:** May cause respiratory tract irritation. Prolonged inhalation may result in nausea, headache, vomiting and central nervous system depression.

**Skin contact:** May cause skin irritation. Existing dermatitis may be exacerbated.

**Eye contact:** May cause irritation to the eyes.

**Ingestion:** May cause nausea, vomiting and central nervous system depression.

**Chronic effects:** Human evidence has indicated that this product can cause skin sensitization. Sensitization is the process whereby a biological change occurs in the individual because of previous exposure to a substance and, as a result, the individual reacts more strongly when subsequently exposed to the substance. Once sensitized, an individual can react to extremely low airborne levels, even below the TLV, or to skin contact.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicological information:** *Bacillus thuringiensis* and low toxicity to fish and wildlife. Oral LD<sub>50</sub> (bobwhite, mallard) > 16665 mg/kg.

**Environmental effects:** Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

## 13. DISPOSAL CONSIDERATIONS

Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local, provincial and federal regulations. Do not dispose of waste with normal garbage or to sewer systems.

## 14. TRANSPORT INFORMATION

**TDG classification:** Not regulated.

**Transportation emergency telephone number:** 613-787-5620.

## 15. REGULATORY INFORMATION

**WHMIS classification:** This product is registered under the *Pest Control Product Act* and is exempt from the requirements of WHMIS.

**NFPA hazard rating:** Fire: 0; Health: 1; Reactivity: 0.

## 16. OTHER INFORMATION

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Norac Concepts Inc. will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This material safety data sheet is valid for three years.

**Prepared by:** Norac Concepts Inc.