

MATERIAL SAFETY DATA SHEET

HI-YIELD THURICIDE CONCENTRATE

DATED: JULY 30, 2008

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Name: Voluntary Purchasing Groups, Inc., P. O. Box 460, Bonham, Texas 75418  
Emergency Telephone: (903) 583-5501 or (800) 424-9300 (Chemtrec) or (800) 255-3924  
For Additional Information Contact: Product Manager or Chemtrec  
Common Name (Used on Label): American Brand Thuricide Concentrate  
EPA# 70051-65-7401

Chemical Name: Not Applicable  
Chemical Class: Biological Insecticide  
Active Ingredient: Bacillus thuringiensis (0.8%)  
EPA Signal Word: Caution  
CAS No.: 68038-71-1

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENTS:	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA Carcinogen
Surfactant	Not Established	Not Established	2/mg/m3(Stel=6 mg/m3)*	No
Sodium Sulfate Solvent	15/mg/m3(Total Dust) 1,000 ppm	10mg/m3(Total Dust) 1,000 ppm	Not Established Not Established	No IARC, (Unassigned)
Bacillus thuringiensis (0.8%) *recommended by manufacturer	Not Established	Not Established	Not Established	No

SECTION 3 - HAZARDS IDENTIFICATION

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

Symptoms of Acute Exposure: Exposure may result in eye irritation. A skin sensitization(allergic) reaction may occur in sensitive individuals.

Hazardous Decomposition Products: None Known.

Physical Properties:

Appearance: Green Liquid  
Odor: Slight Fish Odor

Unusual Fire, Explosion and Reactivity Hazards: None Known.

## SECTION 4 –FIRST AID MEASURES

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given:

<b>Ingestion:</b>	If victim is fully conscious, give a large quantity of water to drink and induce vomiting. Never give anything by mouth to an unconscious person.
<b>Eye Contact:</b>	Immediately rinse eyes with a large amount of running water. Hold eyelids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.
<b>Skin Contact:</b>	Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agents except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.
<b>Inhalation:</b>	Move victim from contaminated area to fresh air. Apply artificial respiration if necessary

### Notes 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.

## SECTION 5 - FIRE FIGHTING MEASURES

### Fire and Explosion:

**FLASH POINT(Test Method):**

Not Available

**FLAMMABLE LIMITS(% in Air):**

Lower: %; Upper: % Not Available

**Autoignition Temperature:**

Not Available

**Flammability:**

Not Applicable

**UNUSUAL FIRE,EXPLOSION and REACTIVITY HAZARDS:**

None Known

### IN CASE OF FIRE:

Use dry chemical, foam, or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### IN CASE OF SPILL OR LEAK:

Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and NIOSH-approved chemical cartridge pesticide respirator with organic vapor pre-cartridges or a supplied-air respirator. For small spills, cover with an absorbent material such as pet litter, Sweep up, and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

## SECTION 7 – HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material, Always wash thoroughly after handling.

## SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

<b>INGESTION:</b>	Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.
<b>EYE CONTACT:</b>	To avoid eye contact, wear safety glasses with side shields or chemical goggles.
<b>SKIN CONTACT:</b>	To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering.
<b>INHALATION:</b>	To avoid breathing mist or vapors, wear a NIOSH-approved chemical cartridge pesticide respirator with organic vapor pre-cartridges or a supplied-air respirator.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Green Liquid
<b>Odor:</b>	Slight Fish Odor
<b>Melting Point:</b>	Not Applicable
<b>Boiling Point:</b>	212°F
<b>Specific Gravity/Density:</b>	1.01
<b>pH:</b>	4.8-5.2

<b>Solubility in H<sub>2</sub>O:</b>	
Bacillus thuringiensis:	Not Available

<b>Vapor Pressure:</b>	
Bacillus thuringiensis:	Not Available

## SECTION 10 – STABILITY AND REACTIVITY

<b>REACTIVITY:</b>	
Stability:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid:	None Known

### HAZARDOUS DECOMPOSITION PRODUCTS

None Known

## SECTION 11 – TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY/IRRITATION STUDIES:

<b>Ingestion:</b>	<b>Slightly toxic</b> Oral LD50 (Rat)	>7.2E+10 CFU/kg
<b>Dermal:</b>	<b>Slightly toxic</b> Dermal LD50 (Guinea Pig):	>1.8E+07 CFU/kg
<b>Inhalation:</b>	<b>Slightly toxic</b> Inhalation LC50 (Mouse)	>3300000000 CFU/Liter
<b>Eye Contact:</b>	Non-irritation (Rabbit)	
<b>Skin Contact:</b>	slightly irritating (Rabbit)	
<b>Skin Sensitization:</b>	Not Available	

### MUTAGENIC POTENTIAL:

Bacillus thuringiensis: None Observed

### REPRODUCTIVE HAZARD POTENTIAL:

Bacillus thuringiensis: Not Available

### CHRONIC/SUBCHRONIC TOXICITY STUDIES:

Bacillus thuringiensis: Not Available

### CARCINOGENIC POTENTIAL:

Bacillus thuringiensis: Not Available

### OTHER TOXICITY INFORMATION:

Not Available

### TOXICITY OF OTHER COMPONENTS:

**Solvent:** Exposure results in skin, eyes or respiratory tract irritation. Prolonged inhalation may result in nausea, headache, vomiting and central nervous system depression. Listed a IARC carcinogen which has not been assigned and overall evaluation (animal data is not adequate).

**Surfactant:** Repeated or prolonged inhalation of dust can cause irritation of nose, throat and lungs. Exposure can result in headache, nausea, dizziness and slight irritation to eyes and skin.

### TARGET ORGANS:

#### ACTIVE INGREDIENTS:

Bacillus thuringiensis: Not Available

#### INERT INGREDIENTS:

Solvent: Eyes, Skin, Respiratory Tract and Central Nervous System  
Surfactant: Eyes, Skin and Respiratory Tract

## SECTION 12 – ECOLOGICAL INFORMATION

### SUMMARY OF EFFECTS:

Bacillus thuringiensis: Low toxicity to fish and wildlife

### Eco-Acute Toxicity:

Bacillus: Bobwhite Oral LD50 >16,665 mg/kg

Thuringiensis: Mallard Oral LD50 >16,665 mg/kg

### Eco-Chronic Toxicity:

Bacillus thuringiensis: Invertebrate(daphnia magna) Life Cycle NOEL 1.6E08 CFU/L

### Environmental Fate

Bacillus thuringiensis: Not Available

## SECTION 13 – DISPOSAL CONSIDERATION

**DISPOSAL:** Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

## SECTION 14 – TRANSPORT INFORMATION

DOT CLASSIFICATION: Not Applicable; No Label or Placard Required

B/L FREIGHT CLASSIFICATION: Insecticides or Fungicides; Agricultural, N.O.S.

INTERNATIONAL TRANSPORTATION: Not applicable

## SECTION 15 – REGULATORY INFORMATION

### SARA TITLE III CLASSIFICATION:

Section 311/312: Acute Health Hazard  
Chronic Health Hazard

Section 313 Chemical(s): Not Applicable

PROPOSITION 65: Not Applicable

CERCLA REPORTABLE QUANTITY(RQ) None

RCRA CLASSIFICATION: Not Applicable

TSCA STATUS: Exempt from TSCA

## SECTION 16 – OTHER INFORMATION

### NFPA HAZARD RATINGS:

Health:	1	0 Least
Flammability:	0	1 Slight
Reactivity:	0	2 Moderate
		3 High
		4 Severe

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