

Emergency Information: Chem Tel (800) 255-3924
 Outside North America Call Collect (813) 248-0573

MATERIAL SAFETY DATA SHEET

Thermo Trilogy Corporation
 9145 Guilford Road
 Suite 175
 Columbia, Maryland 21046

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME : **JAVELIN WG BIOLOGICAL INSECTICIDE**
 PRODUCT CODE : Not Available
 CHEMICAL FAMILY : Bacillus Thuringiensis (85%)
 CHEMICAL NAME : Not Applicable
 FORMULA : Not Applicable

EMERGENCY TELEPHONE NUMBERS:

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2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS #</u>	<u>WT.%</u>	<u>OSHA PEL</u>	<u>TLV's TWA</u>	<u>STEL</u>
Bacillus Thuringiensis	68038-71-1	85	N/A	N/A	N/A
Surfactant			N/A	2 mg/m3	6 mg/m3*
Sodium Sulfate			15 mg/m3 (total dust)	10 mg/m3 (total dust)	

* recommended by manufacturer

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW

This product appears as brown granules with a fishmeal odor, which is intended for use as a pesticide to control insects on agricultural crops. There is no specific antidote if this product is ingested. Treat symptomatically.

Potential Health Effects

ROUTE(S) OF ENTRY : Eyes, skin, oral, inhalation.

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

..... : Exposure may result in eye, skin and respiratory tract irritation.

ACUTE EYE CONTACT : May be slightly irritating.

CHRONIC EYE CONTACT : Chronic exposure not likely from normal use.

ACUTE SKIN CONTACT : May be slightly irritating. A skin sensitization (allergic) reaction may occur in sensitive individuals.

CHRONIC SKIN CONTACT : Chronic exposure not likely from normal use.

CHRONIC INGESTION : Chronic exposure not likely from normal use.

ACUTE INHALATION : May result in respiratory tract irritation.

CHRONIC INHALATION : Chronic exposure not likely from normal use.



CARCINOGENICITY

NTP : N/A
IARC : N/A
OSHA : N/A

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE : Individuals with allergic history or pre-existing dermatitis should use extra care when handling this product.

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 any advice given.

FIRST AID FOR EYES : Immediately wash 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 agent except on the advice of a physician.

FIRST AID FOR SKIN : Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agent except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.

FIRST AID FOR INHALATION : Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

FIRST AID FOR INGESTION : If victim is fully conscious, immediately give large amounts of water to drink and induce vomiting. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES:

NFPA HAZARD CLASSIFICATION : HEALTH HAZARD 1 FIRE HAZARD 0
..... REACTIVITY 0

EXTINGUISHING MEDIA : Dry chemical, Foam, or CO2 extinguishing media.

UNUSUAL FIRE AND EXPLOSION HAZARDS : None Known

SPECIAL FIRE FIGHTING PROCEDURES : Wear full protective clothing and self-breathing apparatus. Evacuate nonessential personnel from the area to prevent exposure to fire, smoke, fumes, or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontamination.



6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES : Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and a NIOSH-approved dust or pesticide respirator with dust prefilters. For small spills, sweep up, keeping dust to a minimum and place in a approved chemical container. Wash the spill 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 a approved manner. Flush the area with water to remove any residue. Do not allow wash water to decontaminate water supplies.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE (MIN. / MAX.) : Not Applicable
SHELF LIFE..... : Stable
SPECIAL SENSITIVITY..... : None Known
HANDLING AND STORAGE PRECAUTIONS..... : Store the material in well-ventilated, secure area away from 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 product. Always wash thoroughly after handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EYE PROTECTION REQUIREMENTS..... : To avoid eye contact, wear safety glasses with side shields or chemical goggles.
SKIN PROTECTION REQUIREMENTS : To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering.
RESPIRATORY / VENTILATION REQUIREMENTS. : To avoid breathing dust, wear a NIOSH-approved dust or pesticide respirator with dust prefilters.
EXPOSURE LIMITS : N/A

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM : Granules
COLOR : Brown
ODOR : Fishmeal Odor
BOILING POINT RANGE..... : Not Applicable
MELT POINT / FREEZE POINT : Not Applicable
FLASH POINT : Not Applicable
AUTO IGNITION : Not Available
UPPER EXPLOSIVE LIMITS (UEL)..... : Not determined
LOWER EXPLOSIVE LIMITS (LEL) : Not determined
pH..... : 5.5-6.5
SOLUBILITY IN WATER..... : Not Available
SPECIFIC GRAVITY : 20.00 lbs./cu.ft.
BULK DENSITY : 20.00 lbs./cu.ft.
% VOLATILE BY WEIGHT..... : Not Available



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VAPOR PRESSURE at 20 °C : Not Available
VAPOR DENSITY : Not Available

10. STABILITY AND REACTIVITY:

STABILITY..... : Stable
HAZARDOUS POLYMERIZATION..... : Will not occur
INCOMPATIBILITIES : None Known
DECOMPOSITION PRODUCTS..... : None Known
CONDITIONS TO AVOID..... : None Known

11. TOXICOLOGICAL INFORMATION:

Oral LD50 (rat): >5,100 mg/kg body weight
Dermal LD50 (rat): 5,000 mg/kg body weight
Inhalation LC50 (rat): Not Available
Eye contact: Not Available
Skin contact: Not Available
Skin sensitization: Not Available
Mutagenic potential: None observed
Reproductive hazard potential: Not Available
Chronic/Subchronic toxicity studies: Not Available
Carcinogenic potential: Not Available
Other toxicity information: Not Available
Toxicity of other components:

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: Not Available

Inert ingredients:

Surfactant: Eyes, skin and respiratory tract

12. ECOLOGICAL INFORMATION:

Fish and wildlife: Low toxicity
Oral LD50 (bobwhite): >16,665 mg/kg
Oral LD50 (mallard): >16,665 mg/kg
Invertebrate (Daphnia magna) life cycle NOEL 1.6E08 CFU/L
Environmental fate: Not Available

13. DISPOSAL CONSIDERATIONS:

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

14. TRANSPORTATION INFORMATION:

D.O.T. PROPER SHIPPING NAME..... : N/A
TECHNICAL SHIPPING NAME..... : JAVELIN WG



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D.O.T. HAZARD CLASS..... : Insecticides or fungicides; Agricultural, N.O.S.
U.N. /N.A. NUMBER..... : N/A
PRODUCT RQ (lbs.)..... : N/A
D.O.T. LABEL..... : Not required
D.O.T. PLACARD..... : Not required

15. REGULATORY INFORMATION:

OSHA STATUS..... : N/A
TSCA STATUS..... : Exempt
CERCLA REPORTABLE QUANTITY..... : N/A
SARA TITLE III:
SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES..... : N/A
SECTION 311/312 HAZARD CATEGORIES..... : Acute health hazard
SECTION 313 TOXIC CHEMICALS..... : Not Applicable
RCRA STATUS..... : N/A

STATE REGULATORY INFORMATION:

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For detail on your regulatory requirements you should contact the appropriate agency in your state.

<u>COMPONENT NAME / CAS NUMBER</u>	<u>CONCENTRATION</u>	<u>STATE CODE</u>
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16. OTHER INFORMATION:

REASON FOR ISSUE..... : Transfer of product to TTC
PREPARED BY..... : Jim Messina
TITLE..... : Senior Registration Specialist
APPROVAL DATE..... : 4/30/98
SUPERSEDES DATE..... : 2/17/97
MSDS NUMBER..... : 70051-66

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