



Material Safety Data Sheet

UltraTec® 10% Special

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products is regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling. All necessary and appropriate precautionary, use, and storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: UltraTec® 10% Special
MSDS IDENTIFICATION NO.: ENV-0152
CHEMICAL NAME: deltamethrin
EPA REGISTRATION NUMBER: 73049-422
PRODUCT DESCRIPTION: For formulation into insecticides only.

UltraTec is a registered trademark of Valent BioSciences Corporation.

MANUFACTURER

Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

EMERGENCY TELEPHONE NUMBERS

HEALTH EMERGENCY OR SPILL (24 hr):
Within the United States: (877) 315-9819
Outside the United States: (651) 632-6184

PRODUCT INFORMATION

ENVIRONMENTAL SCIENCE PRODUCTS:
(866) 822-3731
www.valentbiosciences.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight/Percent	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Deltamethrin * [1R-[1(S*),3]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)	10	None	None	45 ug/m ³ TWA-TEL 100 ug/m ³ STEL (15 minute)
Light Aromatic Petroleum Solvent INCLUDING: (64742-95-6)	90	None	None	100 mg/m ³ TWA
1,2,4-Trimethylbenzene (95-63-6)	< 30	25 ppm TWA	25 ppm TWA 125 mg/m ³ TWA	See regulated exposure limits
Xylenes, mixed isomers (1330-20-7)	< 3	150 ppm STEL 100 ppm TWA	100 ppm TWA 435 mg/m ³ TWA 150 ppm STEL 655 mg/m ³ STEL	See regulated exposure limits

Emergency Telephone: In US (877) 315-9819; Outside US (651) 632-6184
REVISION NUMBER: 3

MSDS NO.:
REVISION DATE:

ENV-0152
09/08/2006

Chemical Name	Weight/ Percent	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Cumene (isopropylbenzene) (98-82-8)	< 2	50 ppm TWA	prevent or reduce skin absorption 245 mg/m ³ TWA 50 ppm TWA	See regulated exposure limits

* Active Ingredient

** Other ingredients, which are maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identity is withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling (877) 315-9819 (within the United States) or (651) 632-6184 (outside the United States) at any time.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

A PALE YELLOW LIQUID WITH A HYDROCARBON ODOR

WARNING

- May be fatal if swallowed.
- Harmful if inhaled or absorbed through skin.
- Causes moderate eye irritation.
- Combustible.
- Skin contact (especially to the face) may result in a tingling sensation and reddening of the skin.
- Extremely toxic to fish and aquatic organisms.
- Avoid breathing vapors.
- Do not get in eyes, on skin or on clothing.
- Keep out of reach of children.

POTENTIAL HEALTH EFFECTS

Acute Toxicity (Primary Routes of Exposure): Inhalation, ingestion, eye and skin contact.

Signs and Symptoms of Systemic Effects: Dizziness, headache, listlessness, nausea and vomiting, epigastric pain, muscular fasciculation of the limbs, unconsciousness, convulsions and coma (very high doses).

Acute Eye Contact: Based on an evaluation of the ingredients and/or similar products, this product may be a moderate eye irritant. Adverse health effects resulting from an exposure may include redness, swelling and pain which could last for an extended period of time.

Acute Skin Contact: Based on an evaluation of the ingredients and/or similar products, this product may cause moderate skin irritation. The expected adverse health effects resulting from an exposure may include redness and swelling. Based on an evaluation of the ingredients and/or similar products, this product may be slightly toxic when absorbed through the skin. Based on an evaluation of the ingredients and/or similar products, this product is not expected to cause allergic skin reactions.

This product contains a pyrethroid. Skin contact with pyrethroids can result in a temporary burning, tingling or itching sensation.

Acute Ingestion: Based on an evaluation of the ingredients and/or similar products, this product may be moderately toxic when ingested. Ingestion may present an aspiration hazard. Ingestion may also cause nausea, vomiting and diarrhea. This product contains petroleum naphtha which may cause kidney damage.

Acute Inhalation: Based on an evaluation of the ingredients and/or similar products, this product is expected to be slightly toxic when inhaled. Exposure to high concentrations in the air may result in respiratory irritation. Signs and symptoms may include, but not be limited to, nasal discharge, sore throat, coughing and difficulty in breathing.

Chronic Toxicity (including cancer): This product is not listed as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or ACGIH.

Potentially Aggravated Medical Conditions: Individuals with allergy history or pre-existing dermatitis should use extra precautions in handling this product.

For complete discussion of the toxicology data from which this evaluation was made, refer to Section 11. For Regulatory Information, refer to Section 15.

4. FIRST AID MEASURES

**EMERGENCY NUMBER: within the United States (877) 315-9819;
outside the United States (651) 632-6184**

EYE CONTACT:

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 eye. Call a poison control center or doctor for treatment advice.

SKIN CONTACT:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

INGESTION:

Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

INHALATION:

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN:

Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis.

This product is a synthetic pyrethroid pesticide. If ingested and vomiting has not occurred, emesis should be induced with supervision. Keep patient's head below hips to prevent aspiration. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered. If localized paresthesia develops, the site should be thoroughly washed with soap and water. Cold cream can be applied to help diminish the effect.

Do not administer milk, cream or other substance containing vegetable or animal fats, which enhance the absorption of lipophilic substances.

5. FIRE FIGHTING MEASURES

FLASH POINT: 115° F (46° C)
FLASH POINT METHOD: SetaFlash Closed Cup

FLAME EXTENSION: Not applicable
AUTOIGNITION: No data available
EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical

FLAMMABLE LIMITS IN AIR - LOWER (%): Not determined
FLAMMABLE LIMITS IN AIR - UPPER (%): Not determined

NFPA RATING:

Health: 2
Flammability: 2
Reactivity: 0
Special: None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

FIRE & EXPLOSION HAZARDS: Material is combustible. Do not use or store near heat or open flame. Liquid can release vapors that readily form flammable mixtures at or above the flash point. Product can accumulate a static charge which may cause a fire or explosion.

FIRE FIGHTING INSTRUCTIONS: Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

HAZARDOUS COMBUSTION PRODUCTS: Combustion may produce toxic gases of: Carbon dioxide, carbon monoxide and various hydrocarbons etc.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY TELEPHONE NUMBERS

HEALTH EMERGENCY OR SPILL (24 hr):
Within the United States: (877) 315-9819
Outside the United States: (651) 632-6184

OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION

If it is safe to do so:

- Evacuate non-essential personnel from the area to prevent human exposure.
- Remove all sources of ignition.
- Ventilate area.
- Stop the source of the spill.
- Contain the spill to prevent further contamination of the soil, surface water or ground water.
- May produce slippery conditions.

GENERAL AND DISPOSAL: Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the adverse effect of the spill. Ensure that the disposal is in compliance with all Federal, Provincial, and local regulations (See Section 13 for applicable RCRA Number). Refer to Section 15 for applicable Reportable Quantity (RQ) and other regulatory requirements.

SPILL OR LEAK

CONTAINMENT: Small Spills: Absorb with an inert absorbent material such as sand, granular clay, sawdust, Fuller's earth, etc. and dispose of in trash. Place in an approved chemical waste container for disposal. Where possible drum should be oriented to prevent further leakage. Do not allow spilled material to enter any body of water.

Large Spills: Eliminate all ignition sources. Stop leak if you can do so without coming into contact with spilled material. Dike far ahead of the spill for later disposal. All equipment used to clean up spill should be grounded. Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs.

CLEANUP: Rinse spill area with small amount of soapy water. Contain and absorb the rinsate with inert adsorbents and place into an approved chemical waste container for disposal. Area can be washed with water to remove the last trace residue. Do not allow water to contaminate water supplies or sewers.

7. HANDLING AND STORAGE

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

HANDLING PRECAUTIONS: May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Use appropriate personnel protective equipment. Avoid contamination of feed and foodstuff. Toxic to fish, do not apply directly to water.

Do not use near heat or open flame.

STORAGE: Do not contaminate water, food or feed by storage or disposal. Keep container closed when not in use. Store upright at room temperature. Avoid exposure to extreme temperature. Under cold conditions some products may precipitate.

Do not store near heat or open flame.

WORK/HYGIENIC PRACTICES: Wash thoroughly with soap and water after handling and before smoking or eating. Remove contaminated clothing and wash clothing before reuse.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

EYES: Do not get this material in your eyes. Eye contact can be avoided by wearing safety glasses or goggles.

RESPIRATORY PROTECTION: Use in a well ventilated area. If not adequate, use a respirator approved by the National Institute of Occupational Health and Safety.

SKIN PROTECTION: Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves (such as butyl or nitrile rubber gloves).

ENGINEERING CONTROLS: Control airborne concentrations below the appropriate exposure limits. Use local exhaust ventilation.

OTHER/GENERAL PROTECTION: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. All workers should shower after handling the product. Launder all articles after each use. Remove contaminated clothing and wash before reuse. Eye wash facility and safety shower should be available.

EXPOSURE LIMITS - See Section 2.

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
COLOR:	Pale yellow
ODOR:	Hydrocarbon
MELTING POINT:	Not applicable
BOILING POINT:	No data available
DENSITY:	0.908 g/mL @ 20° C
VAPOR PRESSURE:	No data available
pH:	5.4 @ 25° C (1% w/v emulsion in water)
VISCOSITY:	1.12 cP @ 20° C; 0.857 cP @ 40° C
SOLUBILITY:	Non miscible

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable at normal ambient temperatures.
INCOMPATIBILITY:	Strong acids and oxidizing agents
OXIDATION/REDUCTION PROPERTIES:	Not reactive with water, monoammonium phosphate, zinc, and potassium permanganate.
EXPLODABILITY:	Product can accumulate a static charge which may cause a fire or explosion.
HAZARDOUS POLYMERIZATION :	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	May include toxic and corrosive fumes of thermal hydrogen bromide, and toxic oxides of nitrogen and carbon.
CONDITIONS TO AVOID:	Avoid contact with heat, sparks, flame and build up of static electricity.

11. TOXICOLOGICAL INFORMATION

ACUTE (Product Specific Information):

No acute toxicity data is available for this formulation. Acute toxicity data is estimated based on an evaluation of the ingredients.

Oral Toxicity LD ₅₀ (rats)	> 50 - 500 mg/kg	EPA Tox Category	II
Dermal Toxicity LD ₅₀ (rabbits)	> 2000 mg/kg	EPA Tox Category	III
Inhalation Toxicity LC ₅₀ (rats)	> 0.5 - 2 mg/L	EPA Tox Category	III
Eye Irritation (rabbits)	Moderately irritating	EPA Tox Category	III
Skin Irritation (rabbits)	Slightly irritating	EPA Tox Category	III
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category	Not applicable

TOXICITY OF ACTIVE INGREDIENTS: DELTAMETHRIN

CHRONIC/CARCINOGENICITY: General neurological symptoms were exhibited in studies with rats, mice and dogs. These symptoms included unsteadiness, abnormal gait, tremors and liquid feces. No histopathologic findings were observed except some signs of slight hepatotoxicity in mice. No Observable Effect Levels (NOEL's) were 1 mg/kg/day in the 2 year rat and dog studies. The NOEL for the 2 year mouse study was approximately 12 mg/kg/day. Deltamethrin was not carcinogenic in rats or mice.

REPRODUCTION: Reproduction studies with rats produced clinical signs, reduced body weight gain and mortality in parents and offspring at very high dosages. The NOEL for the parents and offspring was 80 ppm or approximately 4 - 12 mg/kg/day for adults and 18 to 44 mg/kg/day for offspring.

DEVELOPMENTAL TOXICITY: No developmental effects were observed in studies with rats or rabbits in the absence of maternal toxicity. The developmental NOEL for the rat study was 3.3 mg/kg/day while the developmental NOEL for rabbits was 25 mg/kg/day.

NEUROTOXICITY: Deltamethrin does not inhibit acetylcholinesterase. Neurobehavioral effects including unsteadiness, excessive salivation, vomiting, liquid feces, uncoordinated movement, tremors, spasmodic convulsions which are typically related to Central Nervous System (CNS) stimulation, were observed in some studies. The NOEL for these studies was 1 mg/kg/day or higher.

MUTAGENICITY: No evidence of genotoxicity was observed in a battery of *in vitro* and *in vivo* studies.

TOXICITY OF INERT INGREDIENTS:

CHRONIC/CARCINOGENICITY: This product contains a solvent mixture. Solvents, when inhaled, can cause nasal and respiratory irritation and central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possibly unconsciousness and even death. Ingestion of solvents can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Prolonged or repeated dermal exposures may cause drying, scaling and even blistering of the skin. Aspiration of low viscosity products can cause chemical pneumonitis which can be fatal.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

ACUTE AND LONG-TERM TOXICITY TO FISH AND INVERTEBRATES:

This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds.

ECOLOGICAL TOXICITY:

AVIAN

Deltamethrin Technical is practically non-toxic to birds following acute exposures:
Oral LD₅₀ Bobwhite Quail: >2,250 mg/kg;
Dietary LC₅₀ Bobwhite Quail: > 5,620 ppm;
Dietary LC₅₀ Mallard Duck: > 8,039 ppm.
Reproduction Mallard Duck (repro NOEL): 450 ppm
Reproduction Bobwhite Quail (repro NOEL): 450 ppm

AQUATIC

Deltamethrin Technical is very highly toxic to freshwater organisms:
96 hour LC₅₀: Rainbow Trout: 0.26 µg/l; Bluegill Sunfish: 0.17 µg/l;
96 hour LC₅₀: Sheepshead Minnow: 0.48 µg/l; Eastern Oyster: 8.2 µg/l;
Mollusk Shell Deposition EC₅₀: 8.2 µg/l;
96 hour LC₅₀ Mysid Shrimp: 0.0046 µg/l (NOEC 0.001 µg/l);
Chronic Toxicity Fathead Minnow: MATC = 0.024 µg/l;
Chronic Toxicity Daphnia: MATC = 0.006 µg/l

ENVIRONMENTAL FATE:

The major routes of dissipation are soil binding and soil microbial degradation. Although soil binding is strong, it is not immediate. It appears that spray drift is the only significant route of exposure to aquatic organisms. However, deltamethrin's strong binding capacity to slime, plants, sediment, etc. might rapidly prevent the availability of deltamethrin for bioconcentration in aquatic systems. Additionally, the insolubility in water will be a factor in limiting its bioconcentration as well. Deltamethrin hydrolyzes under alkaline conditions. Leaching studies indicate that deltamethrin is immobile.

OTHER ENVIRONMENTAL INFORMATION:

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollution Discharge Elimination system (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Do not contaminate water when disposing of equipment wash waters.

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

PRODUCT DISPOSAL:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

CONTAINER DISPOSAL:

Plastic: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Metal: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

DISPOSAL METHODS:

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the hazardous waste representative of the nearest EPA Regional Office for Guidance.

Check government regulations and local authorities for approved disposal of this material. Dispose in accordance with applicable laws and regulations.

14. TRANSPORT INFORMATION

DOT (ground) SHIPPING NAME:	Pyrethroid pesticide, liquid, toxic, flammable
DOT TECHNICAL SHIPPING NAME:	Deltamethrin 10% Liquid
UN/NA NUMBER:	UN 3351
HAZARD CLASS:	6.1 (3)
PACKING GROUP:	III
REMARKS:	Marine pollutant when shipped in bulk or non-bulk by water.

15. REGULATORY INFORMATION

REGULATIONS UNDER FIFRA: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

EPA REGISTRATION NUMBER: 73049-422

OTHER U.S. FEDERAL REGULATIONS:

Chemical Name	RCRA - U Series Wastes	Clean Water Act - Hazardous Substances	Clean Water Act Section 307
Deltamethrin * [1R-[1(S*),3]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)	None	Not listed	Not listed
Aromatic hydrocarbon (64742-95-6)	None	Not listed	Not listed
1,2,4-Trimethylbenzene (95-63-6)	None	Not listed	Not listed
Xylenes, mixed isomers (1330-20-7)	Listed	Listed	Not listed
Cumene (isopropylbenzene) (98-82-8)	Listed	Not listed	Not listed

CWA Section 311:

A component of this product is classified as an oil under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Act of 1990. Discharge or spills that produce a visible sheen on either surface or in waterways/sewers that lead to surface water must be reported to the National Response Center at 800-424-8802.

Chemical Name	SARA 313 Chemicals	SARA Section 302	CERCLA Reportable Quantity (RQ):
Deltamethrin * [1R-[1(S*),3]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)	Not listed	Not listed	None
Aromatic hydrocarbon (64742-95-6)	Not listed	Not listed	None
1,2,4-Trimethylbenzene (95-63-6)	1.0% de minimis concentration	Not listed	None
Xylenes, mixed isomers (1330-20-7)	1.0% de minimis concentration	Not listed	100 lb 45.4 kg
Cumene (isopropylbenzene) (98-82-8)	1.0% de minimis concentration	Not listed	2270 kg 5000 lb

SARA (311, 312):

Immediate Health:	Yes
Chronic Health:	Yes
Fire:	Yes
Sudden Pressure:	No
Reactivity:	No

Chemical Name	IARC - Group 1 (carcinogenic to humans)	IARC - Group 2A (Probably carcinogenic)	IARC - Group 2B (Possibly carcinogenic)	NTP Carcinogen List
Deltamethrin * [1R-[1(S*),3]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)	No	No	No	Not listed
Aromatic hydrocarbon (64742-95-6)	No	No	No	Not listed
1,2,4-Trimethylbenzene (95-63-6)	No	No	No	Not listed
Xylenes, mixed isomers (1330-20-7)	No	No	No	Not listed
Cumene (isopropylbenzene) (98-82-8)	No	No	No	Not listed

STATE REGULATIONS:

Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 2 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above.

Chemical Name	California Proposition 65	California - Directors List of Hazardous Substances	NJ Environmental Hazardous Substances List
Deltamethrin * [1R-[1(S*),3]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)	Not listed	Not listed	Not listed
Aromatic hydrocarbon (64742-95-6)	Not listed	Not listed	Not listed
1,2,4-Trimethylbenzene (95-63-6)	Not listed	Listed	Listed
Xylenes, mixed isomers (1330-20-7)	Not listed	Listed	Listed
Cumene (isopropylbenzene) (98-82-8)	Not listed	Listed	Listed

Chemical Name	MI - Critical Materials List	MA Right To Know	NJ Right To Know
Deltamethrin * [1R-[1(S*),3]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)	Not listed	Not listed	Listed
Aromatic hydrocarbon (64742-95-6)	Not listed	Not listed	Not listed
1,2,4-Trimethylbenzene (95-63-6)	Not listed	Listed	Listed
Xylenes, mixed isomers (1330-20-7)	100 lb Annual usage threshold	Listed	Listed
Cumene (isopropylbenzene) (98-82-8)	Not listed	Listed	Listed

Chemical Name	PA Right To Know	RI Right To Know	MN Hazardous Substance
Deltamethrin * [1R-[1(S*),3]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)	Not listed	Not listed	Not listed
Aromatic hydrocarbon (64742-95-6)	Not listed	Not listed	Not listed
1,2,4-Trimethylbenzene (95-63-6)	Listed	Listed	Listed
Xylenes, mixed isomers (1330-20-7)	Listed	Listed	Listed
Cumene (isopropylbenzene) (98-82-8)	Listed	Listed	Listed

California Proposition 65: Not listed

CHEMICAL INVENTORY INFORMATION:

TSCA Inventory List - Registered pesticide, exempt from TSCA.

Chemical Name	Canada NDSL Inventory List	Canada DSL Inventory List -	EINECS Inventory List -
Deltamethrin * [1R-[1(S*),3]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate (52918-63-5)	Not listed	Not listed	258-256-6
Aromatic hydrocarbon (64742-95-6)	Not listed	Listed	265-199-0
1,2,4-Trimethylbenzene (95-63-6)	Not listed	Listed	202-436-9
Xylenes, mixed isomers (1330-20-7)	Not listed	Listed	215-535-7
Cumene (isopropylbenzene) (98-82-8)	Not listed	Listed	202-704-5

CANADIAN REGULATIONS:

WHMIS Hazard Class: Not determined

For information regarding potential adverse health effects from exposure to this product, refer to Sections 3 and 11.

16. OTHER INFORMATION

REASON FOR ISSUE: Revised Sections: 7 and 14.
EPA REGISTRATION NUMBER: 73049-422
MSDS NO.: ENV-0152
REVISION NUMBER: 3
REVISION DATE: 09/08/2006
SUPERCEDES DATE: 6/2/2006

THE INFORMATION IN THIS MSDS IS BASED ON DATA AVAILABLE TO US AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. CONTACT VALENT BIOSCIENCES TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS.

JUDGEMENTS AS TO THE SUITABILITY OF INFORMATION HEREIN FOR THE INDIVIDUAL'S OWN USE OR PURPOSES ARE NECESSARILY THE INDIVIDUAL'S OWN RESPONSIBILITY. ALTHOUGH REASONABLE CARE HAS BEEN TAKEN IN THE PREPARATION OF SUCH INFORMATION, VALENT EXTENDS NO WARRANTIES, MAKES NO REPRESENTATIONS, AND ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR SUITABILITY OF SUCH INFORMATION FOR APPLICATION TO THE INDIVIDUAL'S PURPOSES OR THE CONSEQUENCES OF ITS USE.

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