

# Material Safety Data Sheet



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## UltraTec® DP Concentrate 1.16-2.86

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This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to 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, 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.

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** UltraTec® DP Concentrate 1.16-2.86  
**EPA REGISTRATION NUMBER:** 73049-367  
**MSDS IDENTIFICATION CODE/NO.:** ENV-0128  
**CHEMICAL NAME:** Mixture containing active ingredients; pyrethrins, deltamethrin  
**PRODUCT DESCRIPTION:** An Insecticide for formulation purposes only. Only for formulation into an insecticide for the following uses: Domestic Indoor (house-hold); Domestic Outdoor (lawns, perimeters, ornamentals); Commercial/Industrial/Institutional (indoor & outdoor); Food/Feed Handling Establishments (edible product areas); Terrestrial Non-food (sod farms, golf courses non-agricultural sites).

**MANUFACTURER**  
Valent BioSciences Corporation  
870 Technology Way  
Libertyville, Illinois 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](http://www.valentbiosciences.com)

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## SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name (CAS #) [Chemical Name]	Weight Percent	Exposure Limit	Ref.
<b>Pyrethrins (8003-34-7) *</b> Natural pyrethrin	= 2.86	5 mg/m <sup>3</sup>	OSHA PEL-TWA  ACGIH TLV-TWA
<b>Deltamethrin (52918-63-5)</b> [1 <i>R</i> -[1α( <i>S</i> *),3α]]-cyano(3-phenoxyphenyl)methyl 3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate  Synthetic Pyrethroid	= 1.16	None established	OSHA/ACGIH
		TWA-TEL: 45 µg/m <sup>3</sup>	Mfg.
		STEL (15 minutes): 100 µg/m <sup>3</sup>	Mfg.
<b>Inert Ingredients Containing: **</b>	= 95.98		
<b>Synthetic Isoparaffinic Hydrocarbon</b> (64742-47-8)	< 15	1200 mg/m <sup>3</sup>	Manufacturers recommended TWA
<b>Epoxidized Linseed Oil</b> (8016-11-3)	< 15	None established	

\* 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.

## SECTION 3: HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

AN AMBER, SLIGHTLY VISCOUS LIQUID

**CAUTION:**

- CAUSES MODERATE EYE IRRITATION
- SKIN CONTACT MAY RESULT IN TINGLING AND REDDENING OF SKIN
- TOXIC TO FISH AND OTHER AQUATIC ORGANISMS

### POTENTIAL HEALTH EFFECTS

**Acute Toxicity (Primary Routes of Exposure):** Eye and skin contact

**Signs and Symptoms of Systemic Effects:** May cause gastrointestinal effects such as nausea, vomiting and diarrhea. Inhalation of high vapor or mist concentrations or ingestion of large quantities can result in nervous system effects such as dizziness, headache, loss of coordination, tremors and loss of consciousness, coma. Symptoms usually regress with no long lasting effects.

**Eye:** Slightly irritating.

**Skin:** Moderately irritating. Skin contact may result in transient tingling and reddening of the skin. Prolonged or repeated contact may result in contact dermatitis which is characterized by dryness, chapping and reddening.

**Ingestion:** Harmful or fatal if swallowed. Ingestions of small quantities are usually nonfatal unless aspiration occurs. If aspiration occurs during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death

**Inhalation:** Harmful or fatal if inhaled in excess.

## SECTION 4: FIRST AID MEASURES

### EMERGENCY NUMBER

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Have the product container or label with you when calling poison control center or doctor, or going for treatment.

**EYES:** 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.

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**SKIN:** 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 mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**NOTES TO PHYSICIAN:** Contains petroleum distillate – vomiting may cause aspiration pneumonia.

**HINTS FOR THE PHYSICIAN:** 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.

Do not administer milk, cream or other substances containing vegetable or animal fats. These only enhance absorption of lipophilic substances. If localized paresthesia develops, the site should be thoroughly washed with soap and water. Cold cream can be applied to help diminish the effect.

## SECTION 5: FIRE FIGHTING MEASURES

**FLASH POINT:** 196.5°F (91°C)      **METHOD:** TCC

**AUTOIGNITION:** NA

**EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical, Foam, or Water

**FLAMMABLE LIMITS** (% by volume in air):      Lower: NA      Upper: NA

**FIRE AND EXPLOSION HAZARDS:** Do not use or store near heat or open flame.

**FIRE FIGHTING INSTRUCTIONS:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Extinguish only if flow can be stopped. Use flooding amounts of water as a fog. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors.

**HAZARDOUS COMBUSTION PRODUCTS:** May form toxic materials: Carbon dioxide and carbon monoxide, various hydrocarbons, etc.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**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.

**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:** Soak up liquid with an absorbent material such as sand, sawdust, earth, 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. Drum should be placed in a spillage drum for further movement or transport. Do not allow spill 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 liquid 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 absorbents and place into the same disposal container. Area can be washed with water to remove the last trace residue. Do not allow water to contaminate water supplies or sewers.

**SECTION 7: HANDLING AND STORAGE****HANDLING PRECAUTIONS:**

Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Skin contact (especially to the face) may result in a tingling sensation and reddening of the skin. Avoid contamination of feed and foodstuffs.

This product is extremely toxic to fish and other aquatic organisms.

**STORAGE PRECAUTIONS:**

Do not contaminate water, food or feed by storage or disposal.

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

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

**RESPIRATION/VENTILATION:** Use in a well ventilated area. If not adequate, use a chemical cartridge-type respirator approved by the National Institute of Occupational Health and Safety.

**EYE PROTECTION:** Safety glasses or goggles.

**SKIN PROTECTION:** Use of butyl or nitrile rubber gloves.

**BODY PROTECTION:** Clothing (disposable or washable) to minimize skin contact.

**OTHER/GENERAL PROTECTION:** Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse. Eye wash facility and safety shower should be available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE:</b>	Amber
<b>ODOR:</b>	Sweet, fatty oily like
<b>PHYSICAL STATE:</b>	Liquid
<b>SOLUBILITY (H<sub>2</sub>O):</b>	Emulsifiable
<b>pH:</b>	NA
<b>DENSITY/SPECIFIC GRAVITY</b>	0.9928 g.cm <sup>3</sup> @ 21°C 8.27 lb/gal @ 21°C
<b>VISCOSITY</b>	159 cps @ 22°C

## SECTION 10: STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable

**CONDITIONS TO AVOID:** Excessive heat and sources of ignition.

**INCOMPATIBILITY:** Strong oxidizing agents and acids.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May form toxic materials: Carbon dioxide and carbon monoxide, various hydrocarbons, etc.

**OXIDATION/REDUCTION PROPERTIES:** Product does not have the potential to act as a strong oxidizing or reducing agent.

**HAZARDOUS POLYMERIZATION:** Will not occur

## SECTION 11: TOXICOLOGICAL INFORMATION

**ACUTE** (Product Specific Information):

<b>Oral Toxicity LD<sub>50</sub> (rat):</b>	> 5,000 mg/kg	IV EPA Tox Category
<b>Dermal Toxicity LD<sub>50</sub> (rabbit):</b>	> 5,000 mg/kg	IV EPA Tox Category
<b>Inhalation Toxicity LC<sub>50</sub>(rat):</b>	> 4.99 mg/L	IV EPA Tox Category
<b>Eye Irritation (rabbit):</b>	Slightly irritating	III EPA Tox Category
<b>Skin Irritation (rabbit):</b>	Moderately irritating	III EPA Tox Category
<b>Skin Sensitization (guinea pig):</b>	Sensitizer	

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**TOXICITY OF ACTIVE INGREDIENTS:  
PYRETHRINS**

**CHRONIC/CARCINOGENICITY:** In a recent study, marginally higher incidences of benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in lungs of mice following lifetime high dose exposures to pyrethrum.

The significance of these observations is questionable and under review. The doses at which tumors were observed for both pyrethrum greatly exceeded potential human exposure from labeled uses. Independent and industry toxicological experts who have reviewed the data agree that the findings of the study do not indicate a health risk to human beings.

**TERATOGENICTY (BIRTH DEFECTS)**

There were no birth defects or adverse effects on reproductive parameters in tests with rats and rabbits for either pyrethrum. Pyrethrum is not considered to be teratogenic.

**MUTAGENICITY (GENETIC EFFECTS)**

Pyrethrum was not found to be genotoxic and did not damage DNA in any study conducted (Ames mutagenicity assay, chromosome aberration in Chinese hamster ovaries (CHO) cells, and in the unscheduled DNA synthesis (UNS) assay in cultured human liver cells.

**CARCINOGENICITY:** NTP: None OSHA: None IARC: No OSHA: None

**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 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.

**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.

**REPRODUCTIVE/DEVELOPMENTAL:**

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. 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 to 12 mg/kg/day for adults and 18 to 44 mg/kg/day for offspring.

**MUTAGENICITY:**

No evidence of genotoxicity was observed in a battery of in vitro and in vivo

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studies.

**CARCINOGENICITY:** NTP: None      ACGIH: None      OSHA: None  
IARC: Deltamethrin (52918-63-5) Group 3

## SECTION 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. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

#### **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 Pollutant Discharge Elimination system (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to 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.

## SECTION 13: DISPOSAL CONSIDERATIONS

**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:**

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

### RCRA INFORMATION

**RCRA HAZARDOUS WASTE INGREDIENTS:** None

## SECTION 14: TRANSPORT INFORMATION

**DOT PROPER SHIPPING NAME:** Environmentally hazardous substances, liquid, n.o.s. (Pyrethrins)

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RQ: Pyrethrins

DOT HAZARD CLASS: 9

UN/NA NUMBER: 3082

PACKAGING GROUP: III

REMARKS: NA

EXEMPTION REQUIREMENT: NA

NOTE: The RQ notation is not required for a net quantity of Pyrethrins is one pound or less.

## SECTION 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: 73049-367**

### OTHER U.S. FEDERAL REGULATIONS:

**TSCA Inventory:** Registered Pesticide, exempt from TSCA.

### SARA TITLE III:

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

CAS NUMBER	INGREDIENT NAME	PERCENT BY WEIGHT
8003-34-7	Pyrethrin	= 2.86

#### SARA Title III:

Acute Health Hazard - Yes  
 Chronic Health Hazard - No  
 Fire Hazard - No  
 Sudden Release of Pressure - No  
 Reactivity Hazard - No

This information must be included on all MSDSs that are copied and distributed for this material.

### REGULATED INGREDIENTS

INGREDIENT: Pyrethrin

CAS NUMBER: 8003-34-7

PERCENT BY WEIGHT: = 2.86

Regulations: CERCLA Hazardous substance

SARA EHS 304 Reportable Quantity

State right-to-know: CT, FL, IL, MA, NJ, NY, PA, RI

Canadian Domestic Substance List (DSL)

INGREDIENT: Deltramethrin

CAS NUMBER: 52918-63-5

PERCENT BY WEIGHT: = 1.16

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Regulations: European Inventory of Existing Commercial Substances (EINECS)

INGREDIENT: Aliphatic Petroleum Distillates

CAS NUMBER: 64742-47-8

PERCENT BY WEIGHT: < 15

Regulations: Canadian DSL

European Inventory of Existing Commercial Substances (EINECS)

INGREDIENT: Acetyltributyl Citrate

CAS NUMBER: 77-90-7

PERCENT BY WEIGHT: < 30

Regulations: U.S. TSCA Inventory Status

Australian (AICS)

Canadian Domestic Substance List (DSL)

European Inventory of Existing Commercial Substances (201-067-0)

China (part III)

Japan (2-1327X)

Korean (KE-00158)

Philippine (PICCS)

Switzerland

INGREDIENT: Epoxidized Linseed Oil

CAS NUMBER: 8016-11-3

PERCENT BY WEIGHT: < 15

Regulations: Australian (AICS)

Canadian Domestic Substance List (DSL)

European Inventory of Existing Commercial Substances (EINECS)

INGREDIENT: Polyoxyethylene (20) Sorbitan

CAS NUMBER: 9005-65-6

PERCENT BY WEIGHT: < 5

Regulations: California Proposition 65 (Development toxin) This product can contain a chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Formaldehyde 0.0001

1,4-Dioxane 0.00005

Acetaldehyde 0.000015

Ethyleneoxide 0.000005

**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

**NFPA HAZARD RATING** - HEALTH: 1 Slight  
- FIRE: 2 Moderate  
- REACTIVITY: 0 Negligible  
- SPECIAL: -

**RATINGS:**

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4).

These values are obtained using professional judgment. Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with the information contained in the product MSDS.

\* RQ: Reportable Quantity

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\*\* RCRA waste codes must be determined on a case-by-case basis (i.e., spill, processing waste, etc.).

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

## SECTION 16: OTHER INFORMATION

**REASON FOR ISSUE:** Add "UltraTec®" to product name  
**REVISION NUMBER:** 1  
**REVISION DATE:** 08/25/2006  
**SUPERSEDES DATE:** 06/20/2005  
**EPA REGISTRY NUMBER:** 73049-367  
**MSDS NUMBER:** ENV-0128

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### DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.

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 CORPORATION TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS.

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