



# Material Safety Data Sheet

## Pyrenone® Aerosol Concentrate 50 - 10

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:** Pyrenone® Aerosol Concentrate 50 - 10  
**MSDS IDENTIFICATION NO.:** ENV-0163  
**CHEMICAL NAME:** Mixture; active ingredients: pyrethrin, piperonyl butoxide  
**EPA REGISTRATION NUMBER:** 73049-217  
**PRODUCT DESCRIPTION:** This product is to be used only for the formulation of insecticides.

Pyrenone 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](http://www.valentbiosciences.com)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name   | Weight/Percent | ACGIH Exposure Limits   | OSHA Exposure Limits    | Manufacturer's Exposure Limits |
|---|----------------|-------------------------|-------------------------|--------------------------------|
| Pyrethrin* (8003-34-7)  | 10             | 5 mg/m <sup>3</sup> TWA | 5 mg/m <sup>3</sup> TWA | See regulated exposure limits  |
| Piperonyl butoxide * (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole) (51-03-6) | 50             | None                    | None                    | See regulated exposure limits  |
| Synthetic Isoparaffinic Hydrocarbon † (64742-47-8)  | < 40           | None                    | None                    | 1200 mg/m <sup>3</sup> TWA     |
| Technical White Oil † (8042-47-5)   | < 40           | None                    | None                    | See regulated exposure limits  |

\* Active Ingredient

**Emergency Telephone:** In US (877) 315-9819; Outside US (651) 632-6184  
**REVISION NUMBER:** 1

**MSDS NO.:** ENV-0163  
**REVISION DATE:** 01/11/2008

† Alternate Formulas, in which chemical noted may or may not be present.

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

##### THIN MEDIUM AMBER LIQUID

- CAUTION**
- Harmful if swallowed, inhaled or absorbed through skin.
  - Combustible.
  - Toxic to fish.
  - Avoid contact with skin and clothing.
  - Keep out of reach of children.

#### POTENTIAL HEALTH EFFECTS

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

**Signs and Symptoms of Systemic Effects:** May cause gastrointestinal effects such as nausea, vomiting and diarrhea. Ingestion of large quantities can result in nervous system effects such as dizziness, loss of coordination, tremors and loss of consciousness. Symptoms usually regress with no long lasting effects.

**Acute Eye Contact:** This product is expected to cause minimal or no eye irritation. The expected adverse health effects resulting from an exposure may include redness and possibly some minor swelling.

**Acute Skin Contact:** This product is slightly toxic when absorbed through the skin. This product can 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 is not expected to cause allergic skin reactions.

**Acute Ingestion:** This product is minimally toxic when ingested.

**Acute Inhalation:** This product is minimally toxic when inhaled.

**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:** None known

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:**

Contains petroleum distillates - vomiting may cause aspiration pneumonia.

This product contains a Pyrethroid pesticide. If a small amount is ingested (or if treatment is delayed) oral administration of large amounts of activated charcoal and a cathartic is probably sufficient therapy. If large amounts are ingested and vomiting has not occurred emesis should be induced with supervision. Keep patients 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 substance containing vegetable or animal fats, which enhance the 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.

#### 5. FIRE FIGHTING MEASURES

**FLASH POINT:** > 170° F (>77° C)  
**FLAME EXTENSION:** No data available  
**AUTOIGNITION:** No data available  
**EXTINGUISHING MEDIA:** Water fog, carbon dioxide, foam, dry chemical

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

**NFPA RATING:**

|               |      |
|---------------|------|
| Health:       | 1    |
| 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:** May form toxic materials: Carbon dioxide, carbon monoxide, various hydrocarbons, etc.

## 6. ACCIDENTAL RELEASE MEASURES

### VALENT BIOSCIENCES EMERGENCY PHONE NUMBER:

WITHIN THE UNITED STATES: (877) 315-9819  
OUTSIDE OF 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, especially low areas where vapors may accumulate.
- 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. For additional spill response information refer to the North American Emergency Response Guidebook. Ensure that the disposal is in compliance with all Federal, Provincial, and local regulations, (see Section 15 for applicable RCRA Number, if any). Refer to Section 14 for applicable Reportable Quantity (RQ) and other regulatory requirements.

#### FOR SPILLS OR LEAKS:

##### 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. Ventilate area. 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 absorbents and place into the same disposal container. Area can be washed with water to remove the last trace of residue. Do not allow water to contaminate water supplies or sewers.

Recommended neutralizing agent: dilute alkaline (base) solution.

## 7. HANDLING AND STORAGE

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

**HANDLING PRECAUTIONS:** Harmful if swallowed or absorbed through skin. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid contamination of feed and foodstuff. Do not use near heat or open flame

**STORAGE:** Do not contaminate water, food, or feed by storage or disposal. Store product in original container in a cool, dry area away from children and pets. Do not use or store near heat or open flame. Avoid exposure to extreme temperatures.

## 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 protective eyewear.

**RESPIRATORY PROTECTION:** Use this material only in well ventilated areas. Unless ventilation is adequate to keep airborne concentrations below recommended exposure standards, approved respiratory protection should be worn.

**SKIN PROTECTION:** Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves.

**ENGINEERING CONTROLS:** Exhaust ventilation.

**OTHER/GENERAL PROTECTION:** Wash hands, arms and face with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Wash contaminated clothing with soap and water before reuse.

**EXPOSURE LIMITS - See Section 2.**

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                          |                           |
|--------------------------|---------------------------|
| <b>PHYSICAL STATE:</b>   | Liquid                    |
| <b>COLOR:</b>            | Thin, clear, medium-amber |
| <b>ODOR:</b>             | Very mild                 |
| <b>MELTING POINT:</b>    | Not applicable            |
| <b>BOILING POINT:</b>    | No data available         |
| <b>DENSITY:</b>          | 7.81 lbs/gal              |
| <b>SPECIFIC GRAVITY:</b> | 0.936                     |
| <b>SOLUBILITY:</b>       | Immiscible in water.      |

## 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| <b>CHEMICAL STABILITY:</b>               | Stable at normal ambient temperatures.  |
| <b>INCOMPATIBILITY:</b>                  | Strong oxidizing agents   |
| <b>OXIDATION/REDUCTION PROPERTIES:</b>   | No data available   |
| <b>EXPLODABILITY:</b>                    | No data available   |
| <b>HAZARDOUS POLYMERIZATION :</b>        | Will not occur.   |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS:</b> | May form toxic materials such as: Carbon dioxide, carbon monoxide, various hydrocarbons, etc. |

## 11. TOXICOLOGICAL INFORMATION

### ACUTE (Product Specific Information):

No acute toxicity data is available for this formulation. Acute toxicity data listed below is for a similar formulation EPA Reg. No. 73049-218, containing 7.5% Pyrethrins and 75% Piperonyl Butoxide.

|   |                      |                  |                |
|---|----------------------|------------------|----------------|
| Oral Toxicity LD <sub>50</sub> (rats)       | > 5050 mg/kg         | EPA Tox Category | IV             |
| Dermal Toxicity LD <sub>50</sub> (rabbits)  | > 5050 mg/kg         | EPA Tox Category | IV             |
| Inhalation Toxicity LC <sub>50</sub> (rats) | > 3.2 mg/L           | EPA Tox Category | IV             |
| Eye Irritation (rabbits)                    | Minimally irritating | EPA Tox Category | IV             |
| Skin Irritation (rabbits)                   | Slightly irritating  | EPA Tox Category | IV             |
| Skin Sensitization (guinea pigs)            | Sensitizer           | EPA Tox Category | Not applicable |

**TOXICITY OF ACTIVE INGREDIENTS:** A statistically significant increase in the number of benign liver tumors appeared in mice fed piperonyl butoxide technical at doses which far exceed any anticipated daily human intake. 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.

In a recent study, marginally higher incidences of benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in the lungs of mice following lifetime high doses exposures to pyrethrum.

Doses at which these effects were observed greatly exceed anticipated human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that this product will result in carcinogenic effects.

**DEVELOPMENTAL TOXICITY:** There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits for either pyrethrum or piperonyl butoxide. They are not considered to be tetratogenic.

**MUTAGENICITY:** Pyrethrum was not found to be genotoxic and did not damage DNA in any study conducted (Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultered human liver cells).

PBO was not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

## 12. ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION:

#### ACUTE AND LONG-TERM TOXICITY TO FISH AND INVERTEBRATES:

This product is toxic to fish. Pyrethrins are highly toxic to aquatic animals.

#### 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:**

If partly filled: Call your local solid waste agency 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 procedures approved by state and local authorities.

**DISPOSAL METHODS:**

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

### 14. TRANSPORT INFORMATION

|                                      |   |
|--------------------------------------|---|
| <b>UN/NA NUMBER:</b>                 | NA 1993   |
| <b>DOT (ground) SHIPPING NAME:</b>   | Combustible liquid, n.o.s. (contains petroleum distillates) |
| <b>HAZARD CLASS:</b>                 | 3   |
| <b>PACKING GROUP:</b>                | III   |
| <b>DOT REPORTABLE QUANTITY (RQ):</b> | 1.3 gallons (pyrethrin RQ = 1 lb.)                          |
| <b>EXEMPTION REQUIREMENT:</b>        | 49 CFR 173.150 (f)(1)                                       |

### 15. REGULATORY INFORMATION

**PESTICIDE REGULATIONS:** 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.

**U.S. FEDERAL REGULATIONS:**

| Chemical Name   | RCRA - U Series Wastes | Clean Water Act - Hazardous Substances | Clean Water Act Section 307 |
|---|------------------------|--|-----------------------------|
| Pyrethrin* (8003-34-7)  | None                   | Listed                                 | Not listed                  |
| Piperonyl butoxide * (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole) (51-03-6) | None                   | Not listed                             | Not listed                  |
| Synthetic Isoparaffinic Hydrocarbon † (64742-47-8)  | None                   | Not listed                             | Not listed                  |
| Technical White Oil † (8042-47-5)   | None                   | 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): |
|---|-------------------------------|------------------|----------------------------------|
| Pyrethrin* (8003-34-7)  | Not listed                    | Not listed       | 0.454 kg<br>1 lb                 |
| Piperonyl butoxide * (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole) (51-03-6) | 1.0% de minimis concentration | Not listed       | None                             |
| Synthetic Isoparaffinic Hydrocarbon † (64742-47-8)  | Not listed                    | Not listed       | None                             |
| Technical White Oil † (8042-47-5)   | Not listed                    | Not listed       | None                             |

**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 |
|---|---|---|---|---------------------|
| Pyrethrin* (8003-34-7)  | No                                      | No                                      | No                                      | Not listed          |
| Piperonyl butoxide * (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole) (51-03-6) | No                                      | No                                      | No                                      | Not listed          |
| Synthetic Isoparaffinic Hydrocarbon † (64742-47-8)  | No                                      | No                                      | No                                      | Not listed          |
| Technical White Oil † (8042-47-5)   | 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 |
|---|---------------------------|---|--|
| Pyrethrin* (8003-34-7)  | Not listed                | Listed  | Not listed                                 |
| Piperonyl butoxide * (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole) (51-03-6) | Not listed                | Not listed  | Listed                                     |
| Synthetic Isoparaffinic Hydrocarbon † (64742-47-8)  | Not listed                | Not listed  | Not listed                                 |
| Technical White Oil † (8042-47-5)   | Not listed                | Not listed  | Not listed                                 |

| Chemical Name   | MI - Critical Materials List | MA Right To Know | NJ Right To Know |
|---|------------------------------|------------------|------------------|
| Pyrethrin* (8003-34-7)  | Not listed                   | Listed           | Listed           |
| Piperonyl butoxide * (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole) (51-03-6) | Not listed                   | Not listed       | Listed           |
| Synthetic Isoparaffinic Hydrocarbon † (64742-47-8)  | Not listed                   | Not listed       | Not listed       |
| Technical White Oil † (8042-47-5)   | Not listed                   | Not listed       | Not listed       |

| Chemical Name   | PA Right To Know | RI Right To Know | MN Hazardous Substance |
|---|------------------|------------------|------------------------|
| Pyrethrin* (8003-34-7)  | Listed           | Listed           | Listed                 |
| Piperonyl butoxide * (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole) (51-03-6) | Not listed       | Not listed       | Not listed             |
| Synthetic Isoparaffinic Hydrocarbon † (64742-47-8)  | Not listed       | Not listed       | Not listed             |
| Technical White Oil † (8042-47-5)   | Not listed       | Not listed       | Not 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 - |
|---|----------------------------|-----------------------------|-------------------------|
| Pyrethrin* (8003-34-7)  | Not listed                 | Listed                      | 232-319-8               |
| Piperonyl butoxide * (5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole) (51-03-6) | Not listed                 | Listed                      | 200-076-7               |
| Synthetic Isoparaffinic Hydrocarbon † (64742-47-8)  | Not listed                 | Listed                      | 265-149-8               |
| Technical White Oil † (8042-47-5)   | Not listed                 | Listed                      | 232-455-8               |

**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:** Input MSDS into the new system and minor edits throughout.  
**EPA REGISTRATION NUMBER:** 73049-217  
**MSDS NO.:** ENV-0163  
**REVISION NUMBER:** 1  
**REVISION DATE:** 01/11/2008  
**SUPERCEDES DATE:** None

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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