



# MATERIAL SAFETY DATA SHEET

## *DIMILIN® 4L*

Version: 1.5  
Date of Issue: 06/26/2007  
Date printed: 04/09/2008

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### 1. PRODUCT AND COMPANY IDENTIFICATION

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**Product name :** DIMILIN® 4L

**Chemical name:** Diflubenzuron

**Use of substance/preparation:** Insect Growth Regulator

**Supplier:** Chemtura Corporation  
199 Benson Road  
Middlebury, CT 06749 USA

**Emergency telephone number:** CHEMTREC (24 hours) 800-424-9300  
Chemtura Corporation Emergency Response (24 hours) 800-292-5898

**Environmental, Health and Safety Department:** 866-430-2775

**Prepared by** Product Safety Department      Date of Issue: 06/26/2007  
(US) +1 866-430-2775  
(EU) +44 (0) 1753.603.000  
Email: MSDSRequest@chemtura.com

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### 2. HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW

#### CAUTION!

MAY CAUSE EYE AND SKIN IRRITATION.

PROLONGED AND/OR REPEATED EXPOSURE MAY CAUSE THE FOLLOWING EFFECTS:

- METHEMOGLOBINEMIA

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

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INGREDIENT	% BY WEIGHT
Diflubenzuron CAS# 35367-38-5	40.4
Paraffinic Oil CAS# Trade secret	7.2
Mineral oil CAS# Trade secret	1.8
Mineral Oil Mist CAS# -	



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Ingredients not precisely identified are non-hazardous and/or proprietary.

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**4. FIRST AID MEASURES**

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**Swallowing**

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. 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.

**Skin contact**

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

**Eye contact**

Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lens, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

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**5. FIRE-FIGHTING MEASURES**

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**Autoignition temperature:**

**Not available**

**Hazardous combustion products**

Oxides of carbon.  
Oxides of nitrogen.  
Hydrogen chloride.  
Hydrogen fluoride.

**Special fire fighting procedures**

Do not discharge extinguishing waters into streams, rivers and lakes.

**Special protective equipment for firefighters**

Body covering protective clothing, full "turn-out" gear.  
Self-contained breathing apparatus.

**Extinguishing media**

**Suitable:**            **Large fires:**  
                             - alcohol-type foam or universal-type foams  
**Small fires:**  
                             - CO2  
                             - dry chemical

**Unsuitable:**        - water jets

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**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions**

Wear suitable protective equipment., Avoid contact with eyes and skin.

**Environmental precautions**

Prevent from entering sewer system, surface water or soil.

**Methods for cleaning up**

Observe government regulations.



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**Small spills:** Absorb on inert material such as sand, earth, vermiculite.  
Collect for disposal.

**Large spills** Dike to contain spill.  
Pump excess material into suitable container (metal drums, metal tank, or such).

### 7. HANDLING AND STORAGE

#### HANDLING

##### Handling precautions

Do not get in eyes., Avoid prolonged or repeated contact with skin., Avoid breathing vapor., Use with adequate ventilation., Wash thoroughly after handling.

##### Other precautions

NOTE TO END-USERS: The employee protection recommendations on this MSDS may differ from those on the product label. For normal use of this product, always refer to the personal protective equipment requirements on the product label.

#### STORAGE

##### Storage requirements

Store in a cool, dry place.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE LIMIT VALUES

<u>Component</u>	<u>Country</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Mineral Oil Mist	USA	TWA (mist), ACGIH	5 mg/m <sup>3</sup>	If used in way that generates a "mist" observe the limits for Mineral Oil Mist.
		STEL (mist), ACGIH	10 mg/m <sup>3</sup>	

#### PERSONAL PROTECTION

##### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment., The determination of appropriate respiratory protection is best performed, on a case by case basis, taking into consideration the exposure conditions of the particular operation., The respirator manufacturer should be consulted to ensure that the air-purifying cartridges utilized will provide adequate protection for the exposure conditions and period of wear concerned.

##### Hand protection / protective gloves

Chemical resistant protective gloves

##### Eye protection

Safety glasses with side shields.

##### Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

##### Other protective equipment

Eye bath, Safety shower

#### ENGINEERING CONTROLS

##### Ventilation

General (mechanical) room ventilation is expected to be satisfactory., Special, local ventilation is needed at points where vapors can be expected to escape to the workplace air.

### 9. PHYSICAL AND CHEMICAL PROPERTIES



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### APPEARANCE

**Physical state** Liquid  
**Color** Tan  
**Odor** Slight  
**Odor threshold** Not available

### OTHER PROPERTIES

**Boiling point** Not available  
**Melting point** Not available  
**pH** 8 - 10  
**Density** 1.19 g/cm<sup>3</sup>  
**Vapor pressure**  
**Solubility in water** Not available  
**Solubility in organic solvents** No data available.  
**Partitioning coefficient** Not available  
**Flash point** None available  
**Autoignition temperature** Not available

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## 10. STABILITY AND REACTIVITY

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**Stability:** This product is stable under normal storage and handling conditions.

**Stability - Conditions to avoid:**  
None known.

### Hazardous combustion products:

Oxides of carbon.  
Oxides of nitrogen.  
Hydrogen chloride.  
Hydrogen fluoride.

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## 11. TOXICOLOGICAL INFORMATION

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### SWALLOWING

Test results  
Acute toxicity: LD50 Rat  
Result: > 5,000 mg/kg

### SKIN ABSORPTION

Test results  
Acute toxicity: LD50 - Rabbit  
Result: > 2,000 mg/kg

### INHALATION



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### Test results

Acute toxicity: LC50 - Rat  
Result: 1.9 mg/l  
Exposure time: 4 h

### SKIN CONTACT

#### Test results

Skin irritation: Species: Rabbit  
Result: Slight

### EYE CONTACT

#### Test results

Eye irritation: Species: Rabbit  
Result: Slight

### SENSITIZATION

Test results: Species: - Guinea pigs  
Result: Negative

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## 12. ECOLOGICAL INFORMATION

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<u>Component ecotoxicology</u> Diflubenzuron <u>Acute toxicity fish:</u>	LC50 - Rainbow trout ( <i>Oncorhynchus mykiss</i> ) Result: > 0.2 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Diflubenzuron <u>Acute toxicity fish:</u>	LC50 - Zebra fish ( <i>Brachydanio rerio</i> ) Result: > 0.2 mg/l Exposure time: 96 h
<u>Component ecotoxicology</u> Diflubenzuron <u>Aquatic toxicity to plants:</u>	IC50 - <i>Selenastrum capricornutum</i> Result: > 0.3 mg/l Exposure time: 72 h
<u>Component ecotoxicology</u> Diflubenzuron <u>Acute toxicity to aquatic invertebrates:</u>	EC50 - Water flea ( <i>Daphnia magna</i> ) Result: 0.0071 mg/l Exposure time: 48 h

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## 13. DISPOSAL CONSIDERATIONS

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**General:** Dispose of in accordance with appropriate Federal, State, and local regulations., Avoid discharge to sewers and natural waters.

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## 14. TRANSPORT INFORMATION

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### DOT Classification

Not regulated by ground or rail if shipped or transported in containers less than 450 liters.

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diflubenzuron)  
**Class:** 9  
**UN ID #:** UN3082  
**Packing group:** III



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marine pollutant: MARINE POLLUTANT

### IMDG Classification

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**Class:** 9  
**UN ID #:** UN 3082  
**Packing group:** III  
**Marpol:** MARINE POLLUTANT

### ICAO Classification

Not regulated if shipped or transported in containers less than 450 liters.

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**Class:** 9  
**UN ID #:** UN 3082  
**Packing group:** III

**Technical description** (Diflubenzuron)

marine pollutant

## 15. REGULATORY INFORMATION

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RO's) in 40CFR302.4.

Components present in this product at a level which could require reporting under the statute are:

Chemical name	RQ 5000 pounds for	CAS#	Max weight %
Surfactant	butanol	Trade secret	3.00

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Diflubenzuron	35367-38-5	46.20
Surfactant	Trade secret	3.00

### New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name	CAS#	New Jersey TS Number
Diflubenzuron	35367-38-5	
Dispersant	Trade secret	
Alkylene glycol	Trade secret	
Paraffinic Oil	Trade secret	
Water	Trade secret	
Surfactant	Trade secret	
Mineral oil	Trade secret	

EPA Hazard Categories (SARA 311, 312): Immediate Health Hazard



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### California Proposition 65

\*\*\*\* NONE \*\*\*\*

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## 16. OTHER INFORMATION

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**RECOMMENDED USES AND RESTRICTIONS; NOTE TO END-USERS:** This MSDS is being provided to all interested persons in accordance with federal and state right-to-know laws. Precautionary Statements, First Aid Statements and Directions for Use of this product by end-users are contained on the product label and must be followed at all times.

STP	Standard temperature and pressure
W/W	Weight/Weight 0 (HMIS)
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

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