



# MATERIAL SAFETY DATA SHEET

**ADEPT®**

Version: 1.4  
Date of Issue: 06/26/2007  
Date printed: 01/24/2009

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## 1. PRODUCT AND COMPANY IDENTIFICATION

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**Product name :** ADEPT®

**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.

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

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INGREDIENT	% BY WEIGHT
Diflubenzuron CAS# 35367-38-5	25
Dispersant CAS# Trade secret	< 5
Sodium alkyl sulfate CAS# Trade secret	< 5



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Filler  
CAS# Trade secret

65.6

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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**Flash point:** 230 °F 110 °C  
**Autoignition temperature:** > 110 °C

### **Hazardous combustion products**

Irritating fumes.  
Oxides of carbon.  
Oxides of nitrogen.

### **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:**

- CO2
- dry powder
- foam
- water fog

**Unsuitable:** - water spray

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## 6. ACCIDENTAL RELEASE MEASURES

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### **Personal precautions**

Wear suitable protective equipment.



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## **Environmental precautions**

Prevent from entering sewer system, surface water or soil., May be harmful to aquatic life.

## **Methods for cleaning up**

Sweep up and collect in a suitable container for disposal.

## **7. HANDLING AND STORAGE**

### **HANDLING**

#### **Handling precautions**

Avoid dust formation., Use only with adequate ventilation.

#### **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**

<b><u>Component</u></b>	<b><u>Country</u></b>	<b><u>Type</u></b>	<b><u>Value</u></b>	<b><u>Remark</u></b>
Filler		ACGIH - respirable dust	2 mg/m3	8 hours
<b><u>Component</u></b> Particulates not otherwise regulated	<b><u>Type</u></b> TWA, OSHA	15.0 mg/m3	<b><u>Value</u></b>	<b><u>Remark</u></b> Total dust
	TWA, OSHA	5.0 mg/m3		Respirable fraction
	TWA - ACGIH	10.0 mg/m3		Total inhalable dust
	TWA - ACGIH	3.0 mg/m3		Respirable fraction

### **PERSONAL PROTECTION**

#### **Respiratory protection**

In case of occurrence of dust respiratory protective equipment required.

#### **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.



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## ENGINEERING CONTROLS

### Ventilation

Local exhaust suggested to prevent dust buildup.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### APPEARANCE

Physical state	Powder
Color	White to yellow
Odor	Practically odorless

### OTHER PROPERTIES

Boiling point	Not available
Melting point	Not available
pH	(approximately) 8 Concentration: 10 g/l
Density	2.09 g/cm <sup>3</sup> at 25 °C
Bulk density	0.3 g/cm <sup>3</sup>
Vapor pressure	
Solubility in water	Dispersible
Flash point	>230 °F 110 °C
Thermal decomposition	NONE
Autoignition temperature	> 110 °C
Dynamic viscosity	Not applicable
Oxidizing properties	Not applicable

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## 10. STABILITY AND REACTIVITY

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

### **Incompatible materials:**

Oxidizing agents.  
Strong acids.  
Strong bases.



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**Hazardous combustion products:**

Irritating fumes.  
Oxides of carbon.  
Oxides of nitrogen.

**Hazardous polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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### SWALLOWING

Test results

Acute toxicity: LD50 Rat  
Result: > 10,000 mg/kg

### SKIN ABSORPTION

Test results

Acute toxicity: LD50 - Rat  
Result: > 20,000 mg/kg

### INHALATION

Test results

Acute toxicity: LC50 - Rat  
Result: > 3.52 mg/l  
Exposure time: 4 h

### SKIN CONTACT

Test results

Skin irritation: Species: Rabbit  
Classification: Not irritating

### EYE CONTACT

Test results

Eye irritation: Species: Rabbit  
Result: Mild irritation

### SENSITIZATION

Test results: Species: - Guinea pigs  
Result: Non sensitizing.

### MUTAGENICITY

Assessment: Negative

### CARCINOGENICITY

Assessment: Negative

### TOXICITY TO REPRODUCTION/FERTILITY

AssessmentNegative

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## 12. ECOLOGICAL INFORMATION

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<u>Component ecotoxicology</u>	LC50 - Rainbow trout (Oncorhynchus mykiss)
Diflubenzuron	Result: > 0.2 mg/l



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

## 13. DISPOSAL CONSIDERATIONS

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

## 14. TRANSPORT INFORMATION

### DOT Classification

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Diflubenzuron)  
**Class:** 9  
**UN ID #:** UN3077  
**Packing group:** III

Not regulated by ground or rail if shipped or transported in container less than 400 kg.

### IMDG Classification

**Proper shipping name:** Environmentally hazardous substance, solid, n.o.s.  
**Class:** 9  
**Subsidiary risk:** marine pollutant  
**UN ID #:** UN 3077  
**Packing group:** III  
**Technical description** (Diflubenzuron)

### ICAO Classification

**Proper shipping name:** Environmentally hazardous substance, solid, n.o.s.  
**Class:** 9  
**UN ID #:** UN 3077  
**Packing group:** III  
**Technical description** (Diflubenzuron)

Only regulated by air Into, Out of or Within the United States in containers 881.8 lbs (400 kg) or greater.



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## 15. REGULATORY INFORMATION

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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 (RQ's) in 40CFR302.4.

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

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

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	25.00

### 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	CHEM469
Sodium alkyl sulfate	Trade secret	CHEM470
Filler	Trade secret	CROM400

EPA Hazard Categories (SARA 311, 312): None

### California Proposition 65

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

### CHEMICAL INVENTORY

Canada: PCP# 13816

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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.



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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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