

# POND CARE DIMILIN

Chemwatch Material Safety Data Sheet  
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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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### PRODUCT NAME

POND CARE DIMILIN

### STATEMENT OF HAZARDOUS NATURE

Not considered a hazardous substance according to OSHA 29  
CFR 1910.1200.

### SUPPLIER

Company: Aquarium Pharmaceuticals Incorporated  
Address:  
PO Box 218  
Chalfont  
PA, 18914-0218  
USA  
Telephone: +1 215 822 8181  
Emergency Tel: +1800 222 1222 (US Only)

Company: Aquarium Pharmaceuticals Incorporated  
Address:  
50 East Hamilton Street  
Chalfont  
PA, 18914  
USA  
Telephone: +1 215 822 8181

### PRODUCT USE

Used according to manufacturers directions. For product 177.

### SYNONYMS

"Solution ID# 3356"

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## Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS

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| NAME          | CAS RN     | %   |
|---------------|------------|-----|
| diflubenzuron | 35367-38-5 | 0.1 |

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## Section 3 - HAZARDS IDENTIFICATION

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### CANADIAN WHMIS SYMBOLS

None

### EMERGENCY OVERVIEW

#### RISK

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

#### SWALLOWED

The material has NOT been classified as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. Present definitions

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## Section 3 - HAZARDS IDENTIFICATION

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of harmful or toxic substances are generally based on doses producing mortality (death) rather than those producing morbidity (disease, ill-health).

Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, unintentional ingestion is not thought to be cause for concern.

### EYE

Although the liquid is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).

### SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

### INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

### CHRONIC HEALTH EFFECTS

Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified using animal models); nevertheless exposure by all routes should be minimized as a matter of course.

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## Section 4 - FIRST AID MEASURES

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### SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Center or a doctor.

### EYE

If this product comes in contact with eyes:

- Wash out immediately with water.
- If irritation continues, seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

### INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

### NOTES TO PHYSICIAN

Treat symptomatically.

continued...

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## Section 5 - FIRE FIGHTING MEASURES

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Flash Point (F): Not Applicable  
Lower Explosive Limit (%): Not Applicable  
Upper Explosive Limit (%): Not Applicable  
Autoignition Temp (F): Not Applicable

### EXTINGUISHING MEDIA

- There is no restriction on the type of extinguisher which may be used.  
Use extinguishing media suitable for surrounding area.

### FIRE FIGHTING

- Use water delivered as a fine spray to control fire and cool adjacent area.  
- DO NOT approach containers suspected to be hot.  
- Cool fire exposed containers with water spray from a protected location.  
- If safe to do so, remove containers from path of fire.  
- Equipment should be thoroughly decontaminated after use.

### GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Non combustible.  
- Not considered to be a significant fire risk, however containers may burn.

### FIRE INCOMPATIBILITY

None known.

### PERSONAL PROTECTION

Glasses:  
Chemical goggles.  
Gloves:  
When handling larger quantities:  
General purpose rubber glove.  
Respirator:

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### MINOR SPILLS

- Clean up all spills immediately.  
- Avoid breathing vapors and contact with skin and eyes.  
- Control personal contact by using protective equipment.  
- Contain and absorb spill with sand, earth, inert material or vermiculite.  
- Wipe up.  
- Place in a suitable labeled container for waste disposal.

### MAJOR SPILLS

- Clear area of personnel and move upwind.  
- Alert Emergency Responders and tell them location and nature of hazard.  
- Control personal contact by using protective equipment.  
- Prevent spillage from entering drains, sewers or water courses.  
- Recover product wherever possible.  
- Put residues in labeled containers for disposal.  
- If contamination of drains or waterways occurs, advise emergency services.

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Section 6 - ACCIDENTAL RELEASE MEASURES

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## ACUTE EXPOSURE GUIDELINE LEVELS (AEGL) (in ppm)

AEGL 1: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.

AEGL 2: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGL 3: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening health effects or death.

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## Section 7 - HANDLING AND STORAGE

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### PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

### RECOMMENDED STORAGE METHODS

- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer
- Check all containers are clearly labeled and free from leaks.

### STORAGE REQUIREMENTS

- Store in original containers.
  - Keep containers securely sealed.
  - Store in a cool, dry, well-ventilated area.
  - Store away from incompatible materials and foodstuff containers.
  - Protect containers against physical damage and check regularly for leaks.
  - Observe manufacturer's storing and handling recommendations.
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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE CONTROLS

No data available: diflubenzuron as (CAS: 35367-38-5)

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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No data for Pond Care Dimilin.

### INGREDIENT DATA

DIFLUBENZURON:

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m<sup>3</sup>.

### PERSONAL PROTECTION

#### EYE

- Safety glasses with side shields
- Chemical goggles.
- Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

#### HANDS/FEET

Wear general protective gloves, e.g.. light weight rubber gloves.

#### OTHER

No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Barrier cream.
- Eyewash unit.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

Use appropriate NIOSH-certified respirator based on informed professional judgement. In conditions where no reasonable estimate of exposure can be made, assume the exposure is in a concentration IDLH and use NIOSH-certified full face pressure demand SCBA with a minimum service life of 30 minutes, or a combination full facepiece pressure demand SAR with auxiliary self-contained air supply. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

### ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear an approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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### PHYSICAL PROPERTIES

Liquid.

Mixes with water.

Molecular Weight: Not Applicable

Melting Range (C): Not Available

Solubility in water (g/L): Miscible

Boiling Range (C): Not Available

Specific Gravity (water=1): 1.01

pH (as supplied): 5.5-6.5

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

pH (1% solution): Not Available  
Volatile Component (%vol): Not Available  
Relative Vapor Density (air=1): Not Available  
Lower Explosive Limit (%): Not Applicable  
Autoignition Temp (C): Not Applicable  
State: Liquid

Vapor Pressure (kPa): Not Available  
Evaporation Rate: Not Available  
Flash Point (C): Not Applicable  
Upper Explosive Limit (%): Not Applicable  
Decomposition Temp (°C): Not Available

### APPEARANCE

Cloudy viscous liquid with a mild odor; mixes with water.

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

### CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerization will not occur.

### STORAGE INCOMPATIBILITY

Avoid contamination of water, foodstuffs, feed or seed.  
None known.

## Section 11 - TOXICOLOGICAL INFORMATION

### Pond Care Dimilin

Not available. Refer to individual constituents.

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

#### DIFLUBENZURON:

##### TOXICITY

Oral (rat) LD50: >4640 mg/kg \*

Dermal (rat) LD50: > 10000 mg/kg

Inhalation (rat) LD50: > 35000 mg/m<sup>3</sup>/6h

Oral (mouse) LD50: >4640 mg/kg \*

Intraperitoneal (mouse) LD50: >2150 mg/kg \*

Dermal (rabbit) LD50: >2000 mg/kg \*

Toxicity Class WHO Table 5; EPA III

NOEL (2 y) for rats 40 mg/kg diet. \*

No teratogenic, mutagenic or oncogenic effects observed \*

[\* The Pesticides Manual, Incorporating The Agrochemicals Handbook, 10th Edition, Editor Clive Tomlin, 1994, British Crop Protection Council].

ADI: 0.02 mg/kg/day

##### IRRITATION

Nil Reported

## Section 12 - ECOLOGICAL INFORMATION

Refer to data for ingredients, which follows:

#### DIFLUBENZURON:

Fish LC50 (96hr.) (mg/l): 150-660

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Section 12 - ECOLOGICAL INFORMATION

Daphnia magna EC50 (48hr.) (mg/l): 0.0021  
log Kow (Sangster 1997): 3.88

The material is classified as an ecotoxin\* because the Fish LC50 (96 hours) is less than or equal to 0.1 mg/l

\* Classification of Substances as Ecotoxic (Dangerous to the Environment)

Appendix 8, Table 1

Compiler's Guide for the Preparation of International Chemical Safety Cards:  
1993 Commission of the European Communities.

log Kow 3.89

Ecotoxicology:

Fish LC50 (96 h) for rainbow trout and bluegill sunfish 135 mg/l

Birds: Eight day dietary LC50 for bobwhite quail and mallard ducks

>4640 mg/kg

Bees: LD50 (honey bees) > 0.03 mg/ bee by contact or ingestion.

Daphnia EC50 (48 h) 7.1 ug/l

The benzoylurea insecticides are generally very toxic to water flea (Daphnia magna) and other aquatic organisms.

Non toxic to Earthworms at 780 mg/kg of soil.

Environmental fate:

Soil and water:

Half life in soil is a few days, depending on particle size.

Diflufenzuron is strongly absorbed by soil/ humic acid complex and is virtually immobile in soil. Rapidly degraded in soil (half-life <7 days).

Breaks down to 2,6-difluorobenzoic acid, 4-chlorophenylurea, traces of parachloraniline. All are irreversibly bound to soil.

The phenylurea herbicides may be divided into three categories based on water solubility. The most soluble, fenuron (water solubility 2900 to 3850 ppm) moves substantially in a lateral direction over the soil surface and in a vertical direction in the subsoil. Its movement is also related to soil texture and organic matter content. Movement is greater in coarse-textured soils and decreases at higher organic contents. The middle group (water-solubilities 18 to 580 ppm) are moderately mobile in soil; their relative movement decreases as water solubility decreases. Movement of members of this group also decreases as the organic content matter of the soil increases. The least soluble group (water solubility 2 to 4.8 ppm) are immobile in the soil. Most phenylurea compounds have low vapour pressure and are not volatile from soil. Soil pH does not significantly affect adsorption, mobility or herbicidal activity. The field persistence of these compounds is moderate with residues remaining for several months following application, at most. These herbicides are readily metabolised by most biological systems. A combination of their low mammalian toxicity and biodegradability indicate that they are not significant factors in the contamination of soil and water systems: their significance as environmental pollutants is minimal.

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## Section 13 - DISPOSAL CONSIDERATIONS

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### Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

- Recycle wherever possible.

- Consult manufacturer for recycling options or consult Waste Management

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## Section 13 - DISPOSAL CONSIDERATIONS

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Authority for disposal if no suitable treatment or disposal facility can be identified.

- Dispose of by: Burial in a licensed land-fill or Incineration in a licensed apparatus (after admixture with suitable combustible material)
  - Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.
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## Section 14 - TRANSPORTATION INFORMATION

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NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN,IATA,IMDG

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## Section 15 - REGULATORY INFORMATION

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### RISK

None under normal operating conditions.

### REGULATIONS

#### US EPCRA Section 313 Chemical List For Reporting Year 2004

| Ingredient    | CAS        | % de minimus concentration |
|---------------|------------|----------------------------|
| diflubenzuron | 35367-38-5 | 1.0                        |

diflubenzuron (CAS: 35367-38-5) is found on the following regulatory lists;  
Canada Non-Domestic Substances List (NDSL)  
US EPCRA Section 313 Chemical List For Reporting Year 2004  
US Toxic Substances Control Act (TSCA)

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## Section 16 - OTHER INFORMATION

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