



Material Safety Data Sheet

Uniroyal Chemical

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MSDS No. A340011

Date Issued: 3/7/96

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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.

IDENTIFICATION

Trade Name: MICROMITE® 4L

CAS Number: 35367-38-5 (active)

Chemical Name:

Chemical Family: Amide

N-[[[4-chlorophenyl]amino]carbonyl]-2-6-difluorobenzamide 40.4%
Inerts: 59.6%
Common Name: Diflubenzuron

SPECIAL REGULATORY HAZARDS

| <u>Ingredient</u> | <u>CAS No.</u> | <u>Exposure Limit</u> | <u>OSHA (1910.1200)</u> | <u>EEC*</u> |
|-------------------|----------------|---------------------------------------|-------------------------|---------------------------------------|
| Diflubenzuron | 35367-38-5 | ND | Target organ effects | Possible risk of irreversible effects |
| Petroleum oil | 64742-46-7 | 5 mg/kg ³ (OSHA, ACGIH) | Oil mist | NA |

Hazard assessment based on available data.

Transportation: DOT/ICAO/IATA: Not Regulated

IMO Hazard Class: 9, Miscellaneous; ID No. UN3082 - Marine Pollutant

PHYSICAL DATA

Appearance and Odor: Tan liquid; slight odor

Solubility: ND

Specific Gravity (H₂O=1): 1.19

Vapor Pressure @ 20°C: NA

Melting Point: NA

Vapor Density (Air = 1): NA

Boiling Point: ND

Volatility @ 70°F: Low

Other Data: pH: 8-10

FIRE AND EXPLOSION HAZARD DATA

Flash Point: ND

Autoignition Temperature: ND

Extinguishing Media: Water fog, dry chemical, CO₂. Flammable Limits: ND

Do not use direct stream of water. Product will float and may reignite.

Special Fire Fighting Procedures: Protect against inhalation of combustion products.

Unusual Hazards: None identified.

REACTIVITY DATA

Stability: Stable at ambient temperatures and pressures.

Incompatibility: None identified.

Decomposition Products: Oxides of carbon and nitrogen, HCl and HF under burning conditions.

NA = Not Applicable

ND = Not Determined

* European Economic Community

Crompton makes no representation or warranty with respect to the information in this Material Safety Data Sheet. The information is however, as of this date provided, true and accurate to the best of Crompton's knowledge. This list of information is not intended to be all inclusive. Actual conditions of use and handling may require considerations of information other than, or in addition to, that which is provided herein.

SAP#501065

SPECIAL PROTECTION INFORMATION

Engineering Controls: Sufficient ventilation to minimize vapor exposure.

Personal Protection Equipment: Avoid all personal contact. Observe good personal hygiene. Chemical resistant gloves, protective clothing and eye protection should be worn when handling. Launder clothing before reuse. In the absence of adequate ventilation, use NIOSH-certified **respiratory protection**.

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, SPILLS AND DISPOSAL INFORMATION

Storage: Store in a dry area.

Spills: Absorb on inert material. Shovel into secure containers for proper disposal. Use personal protective equipment as outlined above.

Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Environmental Information: This pesticide is extremely toxic to crab, shrimp and other aquatic invertebrates. Do not apply directly to water or wetlands, (swamps, bogs, marshes, and potholes), except under the forest canopy when used to control forest pests. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

DIFLUBENZURON TECHNICAL

96 hr LC₅₀ values range from 38-165 ppm in a number a aquatic species.

Redwing Blackbird: Oral LD₅₀ - 3.76 g/kg

These data indicate that DIFLUBENZURON is not toxic to fish and birds.

Diflubenzuron is extremely toxic to aquatic invertebrates.

HEALTH RELATED DATA

SPECIFIC HAZARDS: Contact with eyes or skin may cause irritation. Prolonged excessive exposure may cause methemoglobinemia. The very low acute toxicity suggests that this is not a significant adverse effect. There are no known medical conditions that are aggravated by exposure to this material.

Primary Route(s) of Entry: Inhalation, skin absorption.

First Aid Procedures: **IF IN EYES:** Flush with water for 15 minutes. Get medical attention.

IF ON SKIN: Wash with soap and water.

IF INHALED: Remove to fresh air. Give artificial respiration if needed. Get medical attention.

IF SWALLOWED: Induce vomiting only at the instruction of a physician. Never give anything by mouth to an unconscious person. See physician immediately.

TOXICOLOGY INFORMATION:

These data are for
Diflubenzuron Technical:

Oral toxicity: LD₅₀ (rats) - > 5 g/kg

Dermal toxicity: LD₅₀ (rabbits) - > 2.0 g/kg

Inhalation toxicity: LC₅₀ (rats) - >1.91 mg/l

Irritation: eye (rabbits) - slight
skin (rabbits) - minimal

Sensitization: (guinea pig) - negative

21 day rabbit dermal study: Doses of 20, 500 and 1000 mg/kg/day. Effects seen on RBC and methemoglobin levels. NOEL = 20 mg/kg/day.

1 year dog feeding study: Doses of 2, 10, 50 and 250 mg/kg/day. Effects seen on body weight, RBC, methemoglobin and sulfhemoglobin levels and liver and spleen weights. NOEL = 2 mg/kg/day.

2 year rat feeding study: Doses of 8, 31, 125 and 500 mg/kg/day. Effects seen on body weight, RBC, methemoglobin and sulfhemoglobin levels, liver and spleen weights and histopathology. NOEL = <8 mg/kg/day. A chronic feeding study at doses up to 8 mg/kg/day demonstrated a NOEL = 2 mg/kg/day.

Mouse oncogenicity study: Doses of 2, 11, 57, 286 and 1429 mg/kg/day. No increase in tumor incidence.

Rat reproduction study: Doses of 0.5, 1, 2 and 8 mg/kg/day. No adult or fetal effects. NOEL = 8 mg/kg/day. An additional study demonstrated a reproductive NOEL = >5 g/kg/day.

Rabbit teratology study: Doses of 1, 2 and 4 mg/kg/day. No effects. An additional study demonstrated a maternal and developmental NOEL = >1 g/kg/day.

Rat teratology study: Doses of 1, 2 and 4 mg/kg/day. No effects. An additional study demonstrated a maternal and developmental NOEL = >1 g/kg/day.

Mutagenicity: Negative in the following assays: Ames reverse mutation, *S. cerevisiae* point mutation, Mouse lymphoma, Mouse dominant lethal, Balb/3T3 Transformation, Human WI-38 UDS, *B. subtilis* recombination, CHO Chromosome aberration, Mouse micronucleus.

SARA TITLE III (40 CFR 372)

SECTION 313 TOXIC CHEMICALS NOTIFICATION

TOXIC CHEMICAL

Diflubenzuron

CAS %

35367-38-5

% (BY. WT.)

40.4

Carcinogenic per NTP _____ IARC _____ OSHA _____ None X