FLORAMITE®

Uniroyal Chemical Company, Inc.
World Headquarters
Middlebury, CT 06749
MSDS No. A320002
UNIROYAL Emergency Phone: (203) 723-3670
CHEMTREC Transportation Emergency Phone: 1-800-424-9300
SAFETY DATA Information: (203) 573-3303
Date Issued: 8/29/97
Date Revised: 6/7/00; Supercedes: 6/4/99 R-2
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, Statements of Practical Treatment 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: FLORAMITE®
CAS Number: 149877-41-8 (active)
Chemical Family: Carboxylic acid ester
Chemical Name:
Hydrazine carboxylic acid, 2-(4-methoxy-[1,1-biphenyl]-3-yl)-1-methylethyl ester 50%
Inerts: 50%

SPECIAL REGULATORY HAZARDS

Ingredient	CAS No.	Exposure Limit	OSHA (1910.1200)	EEC*
Kaolin clay	1332-58-7	10 mg/m^3, total 5 mg/m^3, resp.	Nuisance Particulate	NA
Hydrated amorphous silica	7631-86-9	6 mg/m^3, total	Nuisance Particulate	NA

Hazard assessment based on available data.
Transportation: IATA/ICAO Hazard Class: Not regulated DOT/IMO Hazard Class: 9, Miscellaneous; ID. No.: UN3077 Marine Pollutant (DOT only Package > or = 882 lbs.)

PHYSICAL DATA

Appearance and Odor: Very fine light tan to white powder; negligible odor
Solubility: Soluble in organic solvents, insoluble in water
Melting Point: ND
Boiling Point: NA
Other Data: NA
Specific Gravity (H_2O=1): 1.74 g/cm @ 25˚C
Vapor Pressure @ 20˚C: ND
Vapor Density (Air = 1): ND
Volatility @ 70˚F: ND

FIRE AND EXPLOSION HAZARD DATA

Flash Point: >230˚F (110˚C) Setaflash
Extinguishing Media: Water spray, dry chemical.
Autoignition Temperature: ND
Flammable Limits: ND
Special Fire Fighting Procedures: Protect against inhalation of combustion products.
Unusual Hazards: May form explosive dust air mixtures.

REACTIVITY DATA

Stability: Stable at ambient temperatures and pressures.
Incompatibility: None identified.
Decomposition Products: None identified.

SPECIAL PROTECTION INFORMATION

Engineering Controls: Sufficient ventilation to minimize dust exposure. Avoid dust accumulation on building or equipment surfaces. Protect closed handling systems against possible dust explosions.
Personal Protection Equipment: Avoid all personal contact. Observe good personal hygiene. Impervious gloves, protective clothing and eye protection should be worn when handling. In the absence of adequate ventilation, NIOSH-certified respiratory protection should be used as necessary.
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 away from sources of direct heat in a dry area.
Spills: Vacuum up using a HEPA filter to avoid creating dust or use floor sweeping compounds to control dust if sweeping. Transfer into proper containers for disposal. Use personal protective equipment as outlined above. Keep out of sewers, drains and any water bodies.
Disposal: In accordance with local, state and federal regulations for disposal of pesticidal waste.
Environmental Information: These data are for Bifenazate Technical:
Bluegill Sunfish 96 hr LC50 - 0.58 ppm
Rainbow trout 96 hr LC50 - 0.76 ppm
Daphnia Magna 48 hr EC50 - 0.50 ppm
Bobwhite Quail LD50 - 1142 mg/kg
Bobwhite Quail LC50 - 2298 ppm
Mallard Duck LC50 - 726 ppm
Bifenazate is highly toxic to aquatic organisms.

HEALTH RELATED DATA

SPECIFIC HAZARDS: Contact with eyes may cause irritation.
Primary Route(s) of Entry: Eye and skin contact
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. Get medical attention.
IF SWALLOWED: Get medical attention.
TOXICOLOGY INFORMATION:
Oral toxicity: LD_{50} (rats) - >5,000 mg/kg
Dermal toxicity: LD_{50} (rats) - >5,000 mg/kg
Inhalation toxicity: LC_{50} (rats) - >5.2 mg/l
Irritation: Eye (rabbit) - Slight
Skin (rabbit) - Non-irritating
Sensitization: (guinea pig) - Non-sensitizing
These data are for Bifenazate:
3 week rat dermal study: Doses of 80, 400 and 1,000 mg/kg/day. Effects seen on body weight, RBC level, spleen weight and histopathology. NOEL = 80 mg/kg/day.
13 week rat feeding study: Doses of 2, 10 and 20 mg/kg/day. Effects seen on food intake, RBC level and spleen, liver and adrenal histopathology. NOEL = 2 mg/kg/day.
1 year dog feeding study: Doses of 1, 10 and 25 mg/kg/day. Effects seen on food consumption and body weight, RBC level and marrow, kidney and liver histopathology. NOEL = 1 mg/kg/day.
2 year rat feeding study: Doses of 1, 4 and 8 (females) or 10 (males) mg/kg/day. Effects seen on body weight, RBC level and spleen histopathology. No increase in tumor incidence. NOEL = 1 mg/kg/day.
Mouse oncogenicity: Doses of 1.4, 14 and 25 (females) or 32 (males) mg/kg/day. Effects seen on body weight and RBC and leukocyte levels. No increase in tumor incidence.
Rat reproduction study: Doses of 1,4 and 10 mg/kg/day. Effects seen on parental body weight. No reproductive effects. NOEL = 1 mg/kg/day.
Rabbit teratology study: Doses of 10, 50 and 200 mg/kg/day. No effects seen. NOEL = > 200 mg/kg/day.
Rat teratology study: Doses of 10, 100 and 500 mg/kg/day. Effects seen on maternal body weight and clinical signs. No teratogenic effects.
Mutagenicity: Negative in the following assays: Ames reverse mutation, Mouse lymphoma, CHO Chromosome aberration and Mouse micronucleus.
NA = Not Applicable
ND = Not Determined
* European Economic Community
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