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EMERGENCY TELEPHONE NUMBER

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PRODUCT INFORMATION

Trade name: Basamid® Granular Soil Fumigant
Synonyms: Dazomet
Description: Dazomet, 99% pure
Active ingredient: Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione
Empirical formula: C₅H₁₀N₂S₂
Molecular mass: 162.3 g mol⁻¹
Chemical family: Thiadiazine
Inert ingredients: NA
SARA Title III Section 313: Listed

CAS #:	533-74-4	PEL:	Not established
DOT Shipping Name:	None	TLV:	Not established
DOT Hazard Class:	None	Bill of lading descriptions:	
DOT labels required:	None	By land:	Compounds, Tree or Weed Killing, (Herbicides), NOIBN
DOT placards required:	None	Bulk by water:	Environmentally Hazardous Substance, Solid, NOS (contains Dazomet), 9, UN 3077, PG III, ERG 171, Marine Pollutant
UN Code:	UN 3077		

PHYSICAL DATA

Boiling point:	104°C	Bulk density	0.6 – 0.8 kg L ⁻¹
Vapor pressure _{20°C} :	5.8 × 10 ⁻⁹ bar	pH	Not determined
Water solubility:	insoluble	Appearance:	White-yellow solid

HEALTH HAZARDS / EFFECTS

Hazards to humans and domestic animals

Hazard Statements: WARNING / AVISO Keep Out of Reach of Children



Effects of overexposure:

WARNING: May be fatal if swallowed. Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Prolonged exposure may cause irritation to skin, eyes, and mucous membranes. The gasses released during the degradation of this product in soil are irritating to the skin, eyes, and mucous membranes. Do not drink alcoholic beverages before, during, or after working with this product. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Existing medical conditions aggravated by exposure:

No information found for this mixture

Animals fed 40 ppm Basamid for two years exhibited liver effects. Rats fed 10 ppm for two years exhibited kidney necrosis.

TOXICOLOGICAL TEST DATA

Rat, Oral LD ₅₀	519 mg kg ⁻¹
Rat, Dermal LD ₅₀	>2,000 mg kg ⁻¹
Rat, Inhalation LC ₅₀ (4hr)	8.4 mg L ⁻¹
Rabbit, Oral LD ₅₀	120 mg kg ⁻¹
Rabbit, Dermal LD ₅₀	7,000 mg kg ⁻¹
Rabbit, Eye Irritation	Not irritation
Rabbit, Skin Irritation	Not irritation

Basamid Granular is not a sensitizer; however, the hydrolysis product, Methyl isocyanate, has been shown to be sensitizing in animal tests.

EMERGENCY AND FIRST AID PROCEDURES

Skin:	Immediately flush affected areas with large amounts of soap and water. Obtain medical attention for irritation.
Eye:	Immediately flush eyes with large amounts of water and get medical attention.
Inhalation:	Assist respiration as needed. Obtain medical attention for irritation. Call a physician or poison control center. Induce vomiting by giving two glasses of warm water and touching back of throat. Do not induce vomiting or give anything by mouth to an unconscious person.
Ingestion:	Do not drink alcoholic beverages before, during, or after working with this product.
WARNING:	
Note to physician:	Treat symptomatically – no known specific antidote.

HEALTH PROTECTION MEASURES

Respiratory Protection:	Supplied air respirators should be worn if large quantities of dust are generated or prolonged exposure is possible.
Ventilation:	Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.
Protective Clothing:	Gloves, long-sleeved shirt, and slacks.



Eye Protection:

Chemical goggles when respirator does not provide eye protection.

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	199°F	Auto-ignition Temperature:	518°F
Flammable Limits:	Not determined	Flammability limits in air:	Not determined
Extinguishing Media:	Water spray, foam, or dry chemical	NFPA 704 Hazard Codes:	Health 2, Flammable 3*, Reactivity 1*
Special firefighting procedures:	Firefighters should be equipped with self-contained breathing apparatus and turnout gear.		

Unusual fire explosion hazards:

*Can form flammable dust/air mixtures at 30 g / m³ air. CO₂ unsuitable for extinguishing media due to dust explosion hazard. The following can be given off in a fire: toxic gases, sulfur dioxides, nitrogen dioxides.

REACTIVITY DATA

Hazardous decomposition:	Decomposes into Methyl isocyanate when in contact with water.	Stability:	Unstable in water
Hazardous Polymerization:	Dos not occur	Conditions to Avoid:	Do not store above 104°F

ENVIRONMENTAL TOXICITY DATA

This product is toxic to algae and fish. Apply this product a specified on the label.

Rainbow Trout, 96 hr LC ₅₀	0.16 mg L ⁻¹
Bluegill Sunfish, 96 hr LC ₅₀	0.16 mg L ⁻¹
Daphnia Magna, 486 hr LC ₅₀	0.3 mg L ⁻¹
Mallard Duck, LC ₅₀	415 mg kg ⁻¹
Bacterial Toxicity, 17 hr EC ₁₀	1.8 mg L ⁻¹

SPILL, DISPOSAL, AND STORAGE PROCEDURES

Spill and leak procedures:	Avoid contact with spilled material. Isolate area and confine spill. KEEP DRY, wet material may release Methyl isocyanate. Cover dry material to prevent dispersal. Place spilled material and damaged package in a labeled container.
Waste Disposal Method:	Bury in a licensed facility. Do not discharge into waterways or sewer systems without proper authority. Consult federal, state, and local authorities for approved alternative procedures.
Container disposal	Empty the package completely into application equipment. The empty package should be disposed of in an approved landfill or by incineration.



Reason for Issue:

Periodic review

Approval Date:

February 25, 2009

Supersedes Date:

December 2, 2005

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