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MATERIAL SAFETY DATA SHEET

This form complies with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. IDENTITY (As Used on Label and List): DNH

SECTION I - Product Identification DNH

Manufacturer Name and Address:

Cayman Chemical Company 1180 E. Ellsworth Rd.

Ann Arbor, MI. 48108

Telephone Numbers:

Cayman Chemical (800)364-9897

Cayman Chemical (734) 971-3335

Last Revision: 10/05/99 MSDS Printed: 10/05/99 Date Entered: 10/05/99

Synonyms:

7-dimethylaminonaphthalene-1,2-dicarboxylic acid hydrazide

Chemical Family: Inhibitors

Hazard Label:

Molecular Formula: C14H13N3O2 Molecular Weight: 255.30

NFPA Ratings: (0-4) NFPA Specific Hazards

Health: Flammability: 0 Reactivity:

SECTION II - Hazardous Ingredients/Identity Information DNH

Hazardous Components (Specific Chemical Identity/Common Name) CAS # 2890-11-1 DNH

CAS # OSHA PEL ACGIH TLV Other Limits Percentage

2890-11-1 100.0 MSDS: DNH 2/27/02 4:02 PM

SECTION III - Physical/Chemical Characteristics DNH

Boiling Point: . . . NE or NA

Melting Point: . . . 302.0C to: 306.0C Specific Gravity: . . . NE or NA (Water = 1) Vapor Pressure: . . . NE or NA (mm Hg)

Vapor Density: ... NE or NA (Air = 1)

Physical States: . . . [] Gas, [] Liquid, [X] Solid Evaporation Rate: . . . NE or NA (Butyl Acetate = 1)

Solubility In Water: ... > 2.5 mg/ml* at 25.0C Other: *0.1 M HCl, sol. in ethanol, DMSO & DMF

Percent Volatile: . . . NE or NA

Appearance and Odor: A crystalline solid

SECTION IV - Fire and Explosion Hazard Data DNH

Flash Pt: NE or NA Method Used:

Explosive Limits: LEL: UEL: Autoignition Pt: NE or NA

Extinguishing Media:

Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Special Fire Fighting Procedures:

Unusual Fire and Explosion Hazards:

SECTION V - Reactivity Data DNH

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability:

Incompatibility - Materials To Avoid:

Hazardous Decomposition Or Byproducts:

Hazardous Polymerization: May occur [] Will not occur [X]

Conditions To Avoid - Hazardous Polymerization:

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SECTION VI - Health Hazard Data DNH

Route(s) of Entry: Inhalation? Yes , Skin? Yes , Eyes? Yes , Ingestion? Yes

Other:

Health Hazards (Acute and Chronic):

Contact may cause skin or eye irritation. The toxicological properties of this compound have not been fully evaluated.

Carcinogenicity: NTP? No , IARC Monographs? No , OSHA Regulated? No

Carcinogenicity/Other Information:

Recommended Exposure Limits:

LD 50/LC 50:

Signs and Symptoms Of Exposure:

Irritating to the skin, eyes, nose, throat, and respiratory tract.

Medical Conditions Generally Aggravated By Exposure:

Emergency and First Aid Procedures:

If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention. If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel. In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

SECTION VII - Precautions for Safe Handling and Use DNH

Steps To Be Taken In Case Material Is Released Or Spilled:

Vacuum or sweep up material and place in disposal container. After removal, flush the contaminated area thoroughly with water.

Waste Disposal Method:

Dispose in accordance with local, state and federal regulations.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.

Precautions To Be Taken in Handling and Storing:

Avoid contact with eyes, skin, and clothing. Do not reuse this container. Store at correct temperature. Use with adequate ventilation. Wash thoroughly after handling.

Other Precautions:

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SECTION VIII- Control Measures DNH

Protective Equipment Summary - Hazard Label Information Eye wash station in work area Lab coat Latex disposable gloves Safety glasses Safety shower in work area Vent Hood

Respiratory Equipment (Specify Type):

Ventilation:

Good general ventilation should be sufficient to control airborne levels.

Eye Protection:

Safety glasses

Protective Gloves:

Latex disposable gloves

Other Protective Clothing:

Lab coat

Work/Hygienic/Maintenance Practices:

Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.

SECTION IX - Additional Comments DNH

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