MATERIAL SAFETY DATA SHEET

Date Printed: 03/10/2011 Date Updated: 02/04/2006 Version 1.1

Section 1 - Pro	duct and Compa	any Information			
Product Name Product Number Brand		1,3-DICYCLOHEXYL-2-THIOUREA - 250 MG S345814 ALDRICH			
Company Address		Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 US			
Technical Phone Fax: Emergency Phone		800-325-5832 800-325-5052 314-776-6555			
Section 2 - Com	position/Info	rmation on Ingredient			
Substance Name 1,3-DICYCLOHEXY	L-2-THIOUREA	CAS # 1212-29-9	SARA 313 No		
Formula Synonyms RTECS Number:	* NCI-C04524	thiourea * N,N'-Dicyclohexylthio	urea		
Section 3 - Haza		action			
HMIS RATING HEALTH: 0 FLAMMABILITY REACTIVITY: NFPA RATING HEALTH: 0 FLAMMABILITY REACTIVITY:	0 : 0 0	n toxicity, please refer to Sectio	on 11		
Section 4 - Fir			JII 11.		
ORAL EXPOSURE If swallowed conscious. Ca INHALATION EXPO If inhaled, :	, wash out mou all a physicia SURE remove to frea	uth with water provided person is	icult,		
amounts of wa	ontact, immed:	iately wash skin with soap and co	pious		
EYE EXPOSURE					

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT N/A AUTOIGNITION TEMP N/A FLAMMABILITY N/A EXTINGUISHING MEDIA Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam. FIREFIGHTING Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions. Section 6 - Accidental Release Measures PROCEDURE(S) OF PERSONAL PRECAUTION(S) Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust. METHODS FOR CLEANING UP Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. Section 7 - Handling and Storage HANDLING User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. STORAGE Suitable: Keep tightly closed. Section 8 - Exposure Controls / PPE ENGINEERING CONTROLS Safety shower and eye bath. Mechanical exhaust required. PERSONAL PROTECTIVE EQUIPMENT Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Hand: Protective gloves. Eye: Chemical safety goggles. GENERAL HYGIENE MEASURES Wash thoroughly after handling. Section 9 - Physical/Chemical Properties

Appearance	Physical State:	Solid		
Property	Value	At	Temperature	or Pressure
Molecular Weight	240.4 AMU			
рH	N/A			
BP/BP Range	N/A			
MP/MP Range	N/A			
Freezing Point	N/A			
Vapor Pressure	N/A			
Vapor Density	N/A			
Saturated Vapor Conc.	N/A			
Bulk Density	N/A			
Odor Threshold	N/A			
Volatile%	N/A			
VOC Content	N/A			
Water Content	N/A			
Solvent Content	N/A			
Evaporation Rate	N/A			
Viscosity	N/A			
Surface Tension	N/A			
Partition Coefficient	Log Kow: 4.365			
Decomposition Temp.	N/A			
Flash Point	N/A			
Explosion Limits	N/A			
Flammability	N/A			
Autoignition Temp	N/A			
Refractive Index	N/A			
Optical Rotation	N/A			
Miscellaneous Data	N/A			
Solubility	N/A			
N/A = not available				

Section 10 - Stability and Reactivity

STABILITY Stable: Stable. Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides.

HAZARDOUS POLYMERIZATION Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation. Skin Absorption: May be harmful if absorbed through the skin. Eye Contact: May cause eye irritation. Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled. Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. NTP CARCINOGEN LIST Rating: No evidence. Species: Mouse/rat Route: Feed CHRONIC EXPOSURE - MUTAGEN Species: Rat Dose: 250 NG/PLATE Cell Type: Embryo Mutation test: Morphological transformation. Species: Mouse Dose: 75 MG/L Cell Type: lymphocyte Mutation test: Mutation in mammalian somatic cells. Section 12 - Ecological Information No data available. Section 13 - Disposal Considerations APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

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Non-Hazardous for Air Transport: Non-hazardous for air transport.
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Section 15 - Regulatory Information

UNITED STATES REGULATORY INFORMATION SARA LISTED: No TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR. DSL: No NDSL: Yes

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not

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