MATERIAL SAFETY DATA SHEET

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Section 1 - Product and Company Information Product Name DL-A-EPSILON-DIAMINOPIMELIC ACID 8 Product Number D1377 SIGMA Brand Company Sigma-Aldrich Canada, Ltd Street Address 2149 Winston Park Drive City, State, Zip, Country Oakville ON L6H 6J8 CA 9058299500 Technical Phone: 800-424-9300 Emergency Phone: Fax: 9058299292 Section 2 - Composition/Information on Ingredient Substance Name CAS # SARA 313 DL-A-EPSILON-DIAMINOPIMELIC ACID 2577-62-0 No Formula C7H14N2O4 Section 3 - Hazards Identification EMERGENCY OVERVIEW Irritant. Irritating to eyes, respiratory system and skin. For additional information on toxicity, please refer to Section 11. Section 4 - First Aid Measures ORAL EXPOSURE If swallowed, wash out mouth with water provided person is conscious. Call a physician. INHALATION EXPOSURE If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. DERMAL EXPOSURE In case of contact, immediately wash skin with soap and copious amounts of water. EYE EXPOSURE In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. 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. EXPOSURE HAZARD(S) Material: Irritant. Section 6 - Accidental Release Measures PROCEDURE(S) OF PERSONAL PRECAUTION(S) Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. 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 contact and inhalation. Do not get in eyes, on skin, on clothing. STORAGE Suitable: Keep tightly closed. Store in a cool dry place. Section 8 - Exposure Controls / PPE ENGINEERING CONTROLS Safety shower and eye bath. Mechanical exhaust required. PERSONAL PROTECTIVE EQUIPMENT Respiratory: Government approved respirator. Hand: Rubber gloves. Eye: Chemical safety goggles. GENERAL HYGIENE MEASURES Wash thoroughly after handling. Wash contaminated clothing before reuse. Section 9 - Physical/Chemical Properties N/A Appearance Property Value At Temperature or Pressure 190.2 AMU Molecular Weight Hα 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
SG/Density	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	N/A
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

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper respiratory tract.Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation.

SIGNS AND SYMPTOMS OF EXPOSURE To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION 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 Non-Hazardous for Air Transport: Non-hazardous for air transport. Section 15 - Regulatory Information EU ADDITIONAL CLASSIFICATION Symbol of Danger: Xi Indication of Danger: Irritant. R: 36/37/38 Risk Statements: Irritating to eyes, respiratory system and skin. S: 26 36 Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. US CLASSIFICATION AND LABEL TEXT Indication of Danger: Irritant. Risk Statements: Irritating to eyes, respiratory system and skin. Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. UNITED STATES REGULATORY INFORMATION SARA LISTED: No 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: No 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 purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.