Section 1 - Product and Company Information

Product Name: [D-Ala2]LHRH
Product Number: 1268
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: Saint Louis, MO 63110 US
Technical Phone: 314-771-5765
Fax: 800-325-5052
Emergency Phone: 414-273-3860 Ext. 5956

Section 2 - Composition/Information on Ingredient

<table>
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<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
<th>EC no</th>
<th>Annex I Index Number</th>
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<td>[D-Ala2]LHRH</td>
<td>5230-19-4</td>
<td>No</td>
<td></td>
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<td>Formula</td>
<td>C56H77N17013</td>
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<td>Synonyms</td>
<td>(D-Ala2)LHRH, (D-Ala2)-LHRH, (D-Ala2) [LH-RH], (D-Ala2) [LH-RHu]</td>
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Section 3 - Hazards Identification

Emergency Overview:
Toxic. May impair fertility.

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 breathing becomes difficult, call a physician.

Dermal Exposure:
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

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

Autoignition Temp: N/A
Extinguishing Media:
Suitable: Carbon dioxide, dry chemical powder, or appropriate foam. Water spray.

Firefighting:
Protective Equipment:
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):
Wear respiratory, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up:
Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Section 8 - Exposure Controls / PPE

Engineering Controls:
Mechanical exhaust.

Personal Protective Equipment:
Respiratory: Government approved respirator.

Hand:
Compatable chemical resistance gloves.

Eye:
Chemical safety goggles.

Section 9 - Physical/Chemical Properties

Appearance:
Physical State: Solid
Molecular Weight: 1,196 AMU
pH: N/A
BP/SP 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's: N/A
VOC Content: N/A
Water Content: N/A
Solvent Content: N/A
Evaporation Rate: N/A
Viscosity: N/A
Partition Coefficient: N/A

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Section 10 - Stability and Reactivity

Stability
Stable

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

Section 11 - Toxicological Information

Route of Exposure
Multiple Routes
May be harmful by inhalation, ingestion, or skin absorption.

Signs and Symptoms of Exposure
May have actions similar to luteinizing hormone releasing hormone (LH-RH) and gonadotropin releasing hormone (Gn-RH) which are the key mediators in the neuroregulation of the secretion of gonadotropins, luteinizing hormone (LH) and follicle-stimulating hormone (FSH). LH-RH can modify sexual behavior by regulating plasma gonadotropin and sex steroid levels.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparedness
Dissolve or mix the material with a combustible solvent and burn in a chemical incineration 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: T
Indication of Danger
Toxic: Risk Statements
R: 60
May impair fertility.
Safety Statements
S: 53 22 36/37/38 45
Avoid exposure - obtain special instructions before use. Do not breathe dust. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Classification and Label Text
Indication of Danger
Toxic:
Risk Statements
May impair fertility.
Safety Statements
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wear suitable protective clothing, gloves, and eye/face protection. Do not breathe dust.

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.