Section 1 - Product and Company Information

Product Name: A9, D-AuL-H+RH ethylamides
Product Number: CAS 931
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63193 US
Technical Phone: 314 771 5765
Fax: 314 771 5766
Emergency Phone: 414 273 3880 Ext. 5996

Section 2 - Composition/Information on Ingredients

Substance Name: DES-GLY10(A-ALAB) LUTEINIZING
CAS #: 79561-22-1
SARA 313: No
EC No.: Annex I Index Number
HORMONEREPleasing: HORMONEETHYLAMIDE

Formula: C50H78N18O12
Chemical Family: Bioactive peptide.
Synonyms:

Section 3 - Hazards Identification

Emergency Overview
Toxic:
May impair fertility.
HMIS Rating
Health: 3
Flammability: 0
Reactivity: 0
NFPA Rating
Health: 3
Flammability: 0
Reactivity: 0

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.

Section 5 - Fire Fighting Measures

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

Firefighting Equipment
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 to be Followed in Case of Leak or Spill
Evacuate area.

Procedure(s) of Personal Protection(s)
Wear respirator, chemical safety goggles, 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 Inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable:
Keep tightly closed. Store at -20°C

Section 8 - Exposure Controls / PPE

Engineering Controls
Mechanical exhaust required.

Personal Protective Equipment
Other:
Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

Sigma Chemical - L4513
Page 2
Sigma-Aldrich Corporation
www.sigma-aldrich.com
General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

**Appearance**
Solid

**Physical State**
Solid

**Molecular Weight**
1,167 AMU

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>BP/BP Range</td>
<td>N/A</td>
</tr>
<tr>
<td>MP/MP Range</td>
<td>N/A</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Saturated Vapor Conc.</td>
<td>N/A</td>
</tr>
<tr>
<td>SG/Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Solvent Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A</td>
</tr>
<tr>
<td>Deposition Temp.</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point ‘F’</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point ‘C’</td>
<td>N/A</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammability</td>
<td>N/A</td>
</tr>
<tr>
<td>Autoignition Temp</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = not available

Section 10 - Stability and Reactivity

**Stability**
Stable

**Stable**
Stable

**Materials to Avoid**
Strong acids, Strong bases

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

Section 11 - Toxicological Information

**Hazardous Polymerization**
Will not occur.

**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**
May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

**Ingestion**
May be harmful if swallowed.

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

**Conditions Aggravated by Exposure**
The toxicological properties have not been thoroughly investigated.

**RTECS Number:** N/A

**Chronic Exposure - Reproductive Hazard**
Result: May cause reproductive disorders.

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. Dispose 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: T
- Indication of Danger: Toxic
- Risk Statements: R 60
  - May impair fertility.

Sigma Chemical - L4513
Page 3
www.sigma-aldrich.com
Safety Statements
Avoid exposure - obtain special instructions before use. 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
Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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 CPRL and the MSDS contains all the information required by the CPRL.
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 guarantees 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.