

9-2-05



SIGMA-ALDRICH

### Material Safety Data Sheet

Date Printed: 08/19/2005  
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Version 1.30

#### Section 1 - Product and Company Information

Product Name	[D-Ala <sup>6</sup> ]-LH-RH		
Product Number	L1898		
Brand	Sigma Chemical		
Company	Sigma-Aldrich		
Street Address	3050 Spruce Street		
City, State, Zip, Country	SAINT LOUIS, MO 63103 US		
Technical Phone:	314 771 5765	Emergency Phone:	414 273 3850 Ext. 5996
Fax:	800 325 5052		

#### Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
(D-ALA6)-LUTEINIZING HORMONE RELEASINGHORMONE	51230-19-4	No		
Formula	C56H77N17O13			
Synonyms	(D-Ala(sup 6))-LHRH, (D-Ala(sup 6))-luteinizing hormone-releasing hormone, WY-18186			

#### 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 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. 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

Compatible chemical-resistant gloves.

###### Eye

Chemical safety goggles.

#### Section 9 - Physical/Chemical Properties

##### Appearance

###### Physical State

Solid

Molecular Weight: 1,196 AMU

pH	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
Partition Coefficient	N/A

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Decomposition Temp. N/A  
Flash Point °F N/A  
Flash Point °C N/A  
Explosion Limits N/A

Flammability N/A  
Autoignition Temp N/A  
Solubility N/A

N/A = not available

## Section 10 - Stability and Reactivity

**Stability**  
Stable  
Stable.

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

**Hazardous Polymerization**  
**Hazardous Polymerization**  
Will not occur.

## 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.

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

**RTECS Number:** OK6400000

### Chronic Exposure - Reproductive Hazard

<i>Species</i>	<i>Dose</i>	<i>Route of Application</i>	<i>Exposure Time</i>
Rat	350 UG/KG	Subcutaneous	(1-7D PREG)
Rat	Result: Effects on Fertility: Other measures of fertility	Subcutaneous	(1-7D PREG)
Rat	350 UG/KG	Subcutaneous	(1-7D PREG)
Rat	Result: Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated).	Subcutaneous	(7-12D PREG)
Rat	3 MG/KG	Subcutaneous	(7-12D PREG)
Rat	Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).		

## 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:** T  
**Indication of Danger**  
Toxic.

**Risk Statements** R: 60  
May impair fertility.

**Safety Statements** S: 53 22 36/37/39 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.

### 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.