

Section 1 - Product and Company Information

Product Name 16A-HYDROXYESTRONE
 Product Number H8004
 Brand SIGMA
 Company Sigma-Aldrich Canada, Ltd
 Address 2149 Winston Park Drive
 Oakville ON L6H 6J8 CA
 Technical Phone: 9058299500
 Fax: 9058299292
 Emergency Phone: 800-424-9300

Section 2 - Composition/Information on Ingredient

Substance Name 16A-HYDROXYESTRONE CAS # 566-76-7 SARA 313 No
 Formula C18H22O3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
 Harmful.
 Limited evidence of a carcinogenic effect.
 Possible carcinogen. Possible mutagen.

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

FLASH POINT
 N/A

AUTOIGNITION TEMP
 N/A

FLAMMABILITY
 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.
 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 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

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
 Use only in a chemical fume hood. Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT
 Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

Section 9 - Physical/Chemical Properties

Appearance Physical State: Solid

Property	Value	At Temperature or Pressure
Molecular Weight	286.4 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	

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

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

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
 By analogy to estrone.

CONDITIONS AGGRAVATED BY EXPOSURE
 The 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.

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IATA
 Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION
 Symbol of Danger: Xn
 Indication of Danger: Harmful.
 R: 40
 Risk Statements: Limited evidence of a carcinogenic effect.
 S: 22-36
 Safety Statements: Do not breathe dust. Wear suitable protective clothing.

US CLASSIFICATION AND LABEL TEXT
 Indication of Danger: Harmful.
 Risk Statements: Limited evidence of a carcinogenic effect.
 Safety Statements: Do not breathe dust. Wear suitable protective clothing.
 US Statements: Possible carcinogen. Possible mutagen.

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.
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