MATERIAL SAFETY DATA SHEET

1-HEXADECANETHIOL, 99+ %

PN 706017 Rev 1

Asemblon has evaluated its products in light of OSHA regulations and European Union Directives. As of the date of this publication, the chemical, physical, and toxicological properties of these products have not been thoroughly investigated. This MSDS is written to apply to known hazards of these products and Good Laboratory Practices.

REF	Name
161006-001	1-Hexadecanethiol, 99+ %
161007-001	1-Hexadecanethiol, 98%

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EMERGENCY CONTACT: **(800) 424-9300 (CHEMTREC)**

COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name	CAS #	SARA 313
1-Hexadecanethiol, 99+ %	2917-26-2	No

3. HAZARDS IDENTIFICATION

Emergency Overview: Irritant. Irritating to eyes, respiratory system & skin. Stench

HMIS Rating	NFPA Rating
Health: 1	Health: 1
Flammability: 1	Flammability: 1
Reactivity: 0	Reactivity: 0

See Section 11 for additional information

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Wash out mouth with water. Get medical attention. Never give anything by mouth to an unconscious person.

Skin Contact: Immediately wash area with soap and plenty of water.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally.

5. FIRE-FIGHTING MEASURES

FLASH POINT: NA
AUTOIGNITION TEMPERATURE: NA
FLAMMABILITY: NA

Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

Protective Equipment for Fire-Fighting: Wear full protective clothing to prevent contact with skin and eyes and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

Specific Hazard(s): Emits toxic fumes under fire conditions.

Specific Method(s) of Fire Fighting: Use water spray to cool fire-exposed containers.

6. ACCIDENTAL RELEASE MEASURES

For clean-up, wear respirator, rubber boots, and heavy rubber gloves. Sweep up and place in a bag and hold for waste disposal. Avoid raising dust. Avoid prolonged or repeated exposure. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

HANDLING: Do not breathe vapor. Avoid contact with eyes, skin, and clothing.
SUITABLE STORAGE: Keep tightly closed. Store in a cool dry place.

8. EXPOSURE CONTROLS /PERSONAL PROTECTION

ENGINEERING CONTROLS
Use only in chemical fume hood. Safety shower and eye wash
PERSONAL PROTECTIVE EQUIPMENT
Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.
GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Form: Solid
Odor: Stench

Property	Value
Molecular Weight	258.31 AMU
MP, MP range	18 - 20 ºC
Density	No information found.
Boiling Point	128-130 ºC
Flash Point	215.6 ºF 102 ºC Method: Closed cup
Solubility in water	No information found.
Explosion Limits	No information found.
Flammability	Flammable
Autoignition	No information found.

10. STABILITY AND REACTIVITY

Stability: Stable
Conditions to Avoid: None identified
Materials to avoid: Strong oxidizing agents
Hazardous Decomposition Products: Sulfur oxides, Carbon monoxide, Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

ROUTE(S) OF EXPOSURE
Skin Contact: May cause skin irritation.
Eye Contact: May cause eye irritation.
Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.
SIGNS AND SYMPTOMS OF EXPOSURE
Exposure can cause: nausea, headache, and vomiting.

12. ECOLOGICAL INFORMATION

No information found.

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORTATION INFORMATION

DOT: Proper Shipping Name: Aviation Regulated Solid, N.O.S.
UN#: 3335
Class: 9
Packing Group: Packing Group III
Hazard Label: Class 9
PIH: Not PIH

IATA: Proper Shipping Name: Aviation Regulated Solid, N.O.S.
IATA UN Number: 3335
Hazard Class: 9

15. REGULATORY INFORMATION

EU REGULATORY INFORMATION
Symbol of Danger: Xi
Indication of Danger: Irritant
R Phrases: 36/37/38 Irritating to respiratory system, eyes and skin.
S Phrases: .26-36. 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 **TSCA: Yes**
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

16. OTHER INFORMATION

PRODUCT INFORMATION: (888) 465-3710
Product Use: For R&D use only. Not for drug, household or other uses.
MSDS first issued: Dec-05
MSDS data revised: Mar-06
EC Legislation: EC Directive 91/155/EEC, 67/548/EEC as amended and adapted to technical progress and 88/379/EEC relating to the classification, packaging, labeling and arrangements for provision of specific information of dangerous substances or preparations. Other EC or national legislation and standards may apply.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results, which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.