



SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 07/11/2000
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Version 1.0

Section 1 - Product and Company Information

Product Name	HEXANES, 98.5+%, A.C.S. SPECTROPHOTOMETRIC GRADE		
Product Number	156175		
Brand	Aldrich Chemical		
Company	Sigma-Aldrich		
Street Address	3050 Spruce Street		
City, State, Zip, Country	St. 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

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>
HEXANES	73513-42-5	No
Formula		
Synonyms		

Section 3 - Hazards Identification

Emergency Overview

Flammable (USA) Highly Flammable (EU). Harmful.

Possible risk of impaired fertility. Irritating to eyes, respiratory system, and skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Target organ(s): Peripheral nervous system. Kidneys. Testes. Target organ(s): Nerves. Kidneys.

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 not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Explosion Hazards

Vapor may travel considerable distance to source of ignition and flash back.

Container explosion may occur under fire conditions.

Flash Point: -9 °F -23 °C
Explosion Limits: Lower: 1.1 % Upper: 7.5 %
Autoignition Temp: 225 °C **Flammability:** N/A

Extinguishing Media
Suitable

Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment

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

Specific Hazard(s)

Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back. Emits toxic fumes under fire conditions.

Specific Method(s) of Fire Fighting

Use water spray to cool fire-exposed containers.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill

Evacuate area. Shut off all sources of ignition.

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Cover with an activated carbon adsorbent, take up and place in closed containers. Transport outdoors. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure

Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep away from heat, sparks, and open flame. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

Engineering Controls

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

Personal Protective Equipment

Other

Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Molecular Weight: 86.18 AMU

<u>Property</u>	<u>Value</u>	<u>At Temperature or Pressure</u>
pH	N/A	
BP/BP Range	68 - 70 °C	760 mmHg

MP/MP Range	-95 °C
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	3 g/l
Saturated Vapor Conc.	N/A
SG/Density	0.672 g/cm ³
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
Decomposition Temp.	N/A
Flash Point °F	-9 °F
Flash Point °C	-23 °C
Explosion Limits	Lower: 1.1 % Upper: 7.5 %
Autoignition Temp	225 °C
Refractive Index	1.379
Solubility	N/A

Section 10 - Stability and Reactivity

Stability

Stable

Stable.

Materials to Avoid

Oxidizing agents, Incompatible with: chlorine, fluorine, and magnesium perchlorate.

Hazardous Decomposition Products

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide.

Hazardous Polymerization

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

Causes skin irritation.

Multiple Routes

May be harmful by inhalation, ingestion, or skin absorption. Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract.

Target Organ(s) or System(s)

Peripheral nervous system. Kidneys. Testes.

Signs and Symptoms of Exposure

Prolonged or repeated contact with skin can cause defatting and dermatitis. Contact with eyes can cause redness, tearing, and blurred vision. Ingestion may cause gastrointestinal irritation. Can cause CNS depression. Exposure can cause: Lung irritation, chest pain, and edema which may be fatal. Headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Neurotoxic effects.

RTECS Number:

Chronic Exposure - Reproductive Hazard

Result: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Section 12 - Ecological Information

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Hexanes

UN#: 1208

Class: 3

Packing Group: Packing Group II

PIH: Not PIH

IATA

Proper Shipping Name: Hexanes

IATA Number: 1208

Hazard Class: 3

Packing Group: II

Section 15 - Regulatory Information

US Classification and Label Text

Indication of Danger

Flammable (USA) Highly Flammable (EU). Harmful.

Risk Statements

Possible risk of impaired fertility. Irritating to eyes, respiratory system, and skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety Statements

Keep away from sources of ignition - no smoking. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid exposure - obtain special instructions before use. Wear suitable protective clothing, gloves, and eye/face protection.

US Statements

Target organ(s): Peripheral nervous system. Kidneys. Testes. Target organ(s): Nerves. Kidneys.

United States Regulatory Information

SARA 313 Listed: No.

Notes: This product is subject to SARA section 313 reporting requirements. This product is subject to SARA section 313 reporting requirements.

Section 16 - Other Information

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. 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 1999 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.