

# MATERIAL SAFETY DATA SHEET



Date Issued: 04/17/2003  
MSDS No: 210100  
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Revision No: 4

## HEXANE

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** HEXANE  
**PRODUCT DESCRIPTION:** Hexane  
**PRODUCT CODE:** 210100  
**PRODUCT FORMULATION NAME:** Hexane  
**CHEMICAL FAMILY:** Aliphatic Petroleum Hydrocarbon  
**GENERIC NAME:** n-Hexane  
**ACTIVE INGREDIENT(S):** Hexane

#### MANUFACTURER

Americhem Sales Corporation  
340 North Street  
Mason MI 48854  
**Emergency Contact:** CHEMTREC or CANUTEC  
**Transportation:** 517-676-9363  
**Service Number:** 517-676-9363

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC (U.S.):** (800) 424-9300  
**CANUTEC (613)** 996-6666

**COMMENTS:** To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR 1910.1200, 91/155/EEC and Canadian Hazardous Products Act.

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Clear, Colorless liquid.

**IMMEDIATE CONCERNS:** CAUTION! May cause eye and skin irritation.

#### POTENTIAL HEALTH EFFECTS

**EYES:** Moderate Irritation and Discomfort.

**SKIN:** Moderate irritation and discomfort. Defatting of skin and redness are possible. Toxic systemic effects from absorption are expected to be minor.

**INGESTION:** Gastrointestinal tract irritation and/or discomfort is possible.

**INHALATION:** Vapors may be mildly irritating to lungs. Overexposure may result in dizziness, headache, excitation, central nervous system depression.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**CHRONIC EFFECTS:** Chronic high level n-Hexane exposure damages the nervous system initially producing a lack of feeling in the extremities and possibly progressing to a more severe nerve damage. Inhalation of high levels (1000 and 5000 ppm) of n-Hexane has produced testicular damage in rats. Mice exposed to the same dose levels showed no testicular effects.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Hexane	100	110-54-3	203-777-6

#### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for 15 minutes. If irritation persists, seek medical attention.

**SKIN:** Wash exposed area with mild soap and water. Get medical attention if irritation develops or persists.

**INGESTION:** Do not induce vomiting. Danger from aspirating into lungs exceeds short term toxic effects. Get immediate medical help.

**INHALATION:** Remove victim from area of exposure. If unconscious, give oxygen. Give artificial respiration if not breathing. Get immediate medical attention.

**NOTES TO PHYSICIAN:** Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

#### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** (-15°F) ASTM D56

**FLAMMABLE LIMITS:** 1.2 to 7.7

**AUTOIGNITION TEMPERATURE:** Not Available

**EXTINGUISHING MEDIA:** Use dry chemical, foam, or carbon dioxide.

**EXPLOSION HAZARDS:** Carbon oxides formed when burned. Highly flammable vapors which are heavier than air may accumulate in low areas and/or spread along ground away from handling site. Flash back along vapor trail is possible.

**FIRE FIGHTING PROCEDURES:** Proper respiratory equipment to protect against the hazardous effects of combustion products is recommended. Water in a straight hose stream may cause fire to spread and should be used as a cooling medium only.

#### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Extinguish possible sources of ignition. Evacuate all unprotected personnel and ventilate area. Only personnel equipped with proper respiratory, skin/eye protection should enter spill area. Dike area to contain spill and clean up by absorbing on an inert absorbant or other means. Don't flush into sewers or natural waterways.

**LARGE SPILL:** Contain material as described above and call the local fire or police department for immediate emergency assistance.

#### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Do not store with Oxidizing agents.

**HANDLING:** Do not get in eyes, on skin or on clothing. Do not breathe vapors, mist, fume or dust. Do not swallow, may be aspirated into lungs. Wear protective equipment and/or garments if exposure conditions warrant. Wash thoroughly after handling. Launder contaminated clothing before reuse. Use only with adequate ventilation.

**STORAGE:** Store unopened containers under cool, dry and ventilated conditions. Keep away from heat, sparks and flame.

**SHELF LIFE:** THE SHELF LIFE OF THIS PRODUCT IS UNDETERMINED, BUT MAY BECOME SUSPECT ONE YEAR FROM THE DATE OF PURCHASE.

**COMMENTS:** Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.106. Grounding and bonding required. Keep separated from incompatible substances.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SupplierOEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Hexane	<b>TWA</b>	50 ppm <sup>[1]</sup>	180 mg/m <sup>3</sup> <sup>[1]</sup>	50 ppm	176 mg/m <sup>3</sup>	NL ppm	NL mg/m <sup>3</sup>
	<b>STEL</b>	NL ppm	NL mg/m <sup>3</sup>	NL ppm	NL mg/m <sup>3</sup>	NL ppm	NL mg/m <sup>3</sup>
<b>OSHA TABLE COMMENTS:</b>							
1. NL = Not Listed							

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields or goggles when handling this material.

**SKIN:** To prevent any contact, wear impervious protective clothing such as neoprene or butyl rubber gloves, apron, boots or whole bodysuit, as appropriate.

**RESPIRATORY:** Use NIOSH/MSHA approved respirators when vapors or mist concentrations exceed permissible exposure limits.

**PROTECTIVE CLOTHING:** Chemical resistant boots, apron, etc. as necessary to prevent contamination of clothing and skin contact.

**WORK HYGIENIC PRACTICES:** Good personal hygiene practices should always be followed.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Flash Point	Specific Gravity
Hexane	-7	0.657

**PHYSICAL STATE:** Liquid

**ODOR:** Mild Hydrocarbon Odor

**APPEARANCE:** Clear

**COLOR:** Colorless

**pH:** Not Available

**PERCENT VOLATILE:** 100

**VAPOR PRESSURE:** 5.5 psi at (100 °F)

**VAPOR DENSITY:** ~ 3 (Air=1)

**BOILING POINT:** (151 °F) to (157 °F)

**FLASHPOINT AND METHOD:** (-15 °F) ASTM D56

**SOLUBILITY IN WATER:** Negligible

**EVAPORATION RATE:** 8.1 (n-Butyl Acetate=1)

**SPECIFIC GRAVITY:** 0.675 (water=1) at (60 °F)

**MOLECULAR WEIGHT:** 86.17

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** Stable

**POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Exposure to excessive heat, open flames and sparks. Avoid conditions that favor the formation of excessive mists and/or fumes.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of Carbon when burned.

**INCOMPATIBLE MATERIALS:** Strong oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** May cause moderate burning, tearing, redness and swelling.

**SKIN EFFECTS:** Prolonged or repeated contact may cause drying, cracking, or irritation.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** KEEP OUT OF SURFACE WATERS, SEWERS, AND WATERWAYS ENTERING OR LEADING TO SURFACE WATERS. NOTIFY AUTHORITIES IF ANY EXPOSURE TO THE GENERAL PUBLIC OR ENVIRONMENT OCCURS OR IS LIKELY TO OCCUR.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Hexanes

**PRIMARY HAZARD CLASS/DIVISION:** 3

**UN/NA NUMBER:** 1208

**PACKING GROUP:** II

**REPORTABLE QUANTITY (RQ) UNDER CERCLA:** 5000#

**LABEL:** Flammable Liquid

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**FIRE:** Yes **PRESSURE GENERATING:** No **ACUTE:** Yes **CHRONIC:** Yes

**313 REPORTABLE INGREDIENTS:** n-Hexane (110-54-3) - 45 - 70% by wt.

**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

Chemical Name	Wt.%	CAS
Hexane	100	110-54-3

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

**CERCLA REGULATORY:** Sec. 103 - Yes; RQ = 5000 lbs.

Chemical Name	Wt.%	CERCLA RQ
Hexane	100	5000 lbs.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
Hexane	110-54-3

**TSCA REGULATORY:** This material or its components are listed in the TSCA inventory.

**16. OTHER INFORMATION**

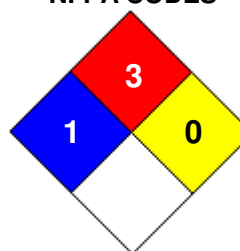
**REASON FOR ISSUE:** New MSDS

**REVISION SUMMARY:** Revision #: 4 This MSDS replaces the January 04, 2006 MSDS. Any changes in information are as follows: In Section 11 Eye Effects Skin Effects In Section 12 Environmental Data In Section 16 HMIS Health

**HMIS RATING**

<b>HEALTH:</b>	*	<b>1</b>
<b>FLAMMABILITY:</b>		<b>3</b>
<b>PHYSICAL HAZARD:</b>		<b>0</b>
<b>PERSONAL PROTECTION:</b>	<b>C</b>	

**NFPA CODES**



**ADDITIONAL MSDS INFORMATION:** Danger! Extremely flammable. Treat as an osha class IB flammable liquid. This substance has not been identified as a carcinogen by NTP, IARC, or OSHA. Collateral exposure to Alcohol, Acetone, Methyl ethyl ketone and Chloroform may potentiate or enhance the toxic effects of hexane. Reproductive effects have been reported in animal studies. An overexposure to vapors from this product may cause headaches, dizziness, nausea and loss of consciousness. Chronic exposure to liquid and/or vapors may adversely affect kidneys, liver, and respiratory system or aggravate preexisting conditions. Avoid breathing vapors and liquid contact with eyes and/or skin.

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