

## MATERIAL SAFETY DATA SHEET

NFPA	HMIS	Personal Protective Equipment
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Health Hazard	2
Fire Hazard	3
Reactivity	0



See Section 8.

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product code:</b>	H1010
<b>Product Name:</b>	HEXANES, REAGENT, ACS
<b>Chemical Name:</b>	No information available
<b>Synonyms:</b>	No information available
<b>Recommended use:</b>	Reagent. Solvent. Cleaning agent for textile, furniture, and leather industries.
<b>CAS #:</b>	Mixture
<b>RTECS #</b>	MN9275000 (for n-Hexane) GY4640000 (for Methylcyclopentane)
<b>Formula:</b>	No information available
<b>CI#:</b>	Not available
<b>Supplier:</b>	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
<b>Order Online At:</b>	<a href="https://www.spectrumchemical.com">https://www.spectrumchemical.com</a>
<b>Emergency Telephone Number:</b>	CHEMTREC: 1-800-424-9300
<b>Contact Person:</b>	Regina Wachenheim (East Coast)
<b>Contact Person:</b>	Martin LaBenz (West Coast)

### 2. HAZARDS IDENTIFICATION

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

DANGER!  
EXTREMELY FLAMMABLE  
WARNING! IRRITANT  
Irritating to skin  
May cause eye irritation  
May cause irritation of respiratory tract

**Odor:**  
Gasoline-like.

**Physical state:**  
Liquid.

**Appearance:**  
No information available

**Color:**  
Clear. Colorless.

### OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

### POTENTIAL HEALTH EFFECTS

#### Principal Routes of Exposure:

Ingestion. Skin. Inhalation.

#### Acute Potential Health Effects:

##### Skin Contact:

Contact causes skin irritation. Symptoms may include redness, increased blood flow, swelling, pain, itching, painful burning, followed by blister formation. It may be absorbed through the skin. If absorbed through skin it may cause systemic effects.

##### Eye Contact:

May cause slight irritation. Mild eye irritation.

##### Inhalation:

May cause irritation of respiratory tract. May cause nausea and vomiting. May affect respiration. Inhalation of vapors may cause dizziness or suffocation. May cause asphyxiation in high concentrations. May cause build-up of fluid in the lungs (pulmonary edema). May cause central nervous system effects. May affect the nervous system. It may affect the brain. May affect the liver. May affect the urinary system. It may affect the blood. May affect eyes/vision.

##### Ingestion:

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhoea. May cause abdominal pain. Aspiration hazard if swallowed - can enter the lungs and cause damage. Aspiration into the lungs may cause chemical pneumonitis. Aspiration into the lungs may cause pulmonary edema. May cause central nervous system effects. May affect the liver. May affect the blood.

#### Chronic Potential Health Effects:

##### Component

Hexane  
110-54-3 (40-60)  
Hexane, other isomers  
(predominately 2-Methylpentane and  
3-Methylpentane)  
Mixture (40-60)  
Methylcyclopentane  
96-37-7 (1-20)

##### Carcinogen Status:

No information available

No information available

No information available

#### Target Organs:

Skin. Central nervous system. Peripheral nervous system. Respiratory system.

#### Mutagenic Effects:

May affect genetic material  
Animal experiments showed mutagenic effects

Product code: H1010

Product name: HEXANES, REAGENT,  
ACS

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**Teratogenic Effects:** May cause birth defects (teratogenic effects) based on animal test data

**Aggravated Medical Conditions:** Pre-existing skin disorders. Impaired respiratory function.

See Section 11 for additional Toxicological Information

### POTENTIAL ENVIRONMENTAL EFFECTS

No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Hexane	110-54-3	40-60
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	Mixture	40-60
Methylcyclopentane	96-37-7	1-20

### 4. FIRST AID MEASURES

**General Advice:** Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126).

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician.

**Eye Contact:** Flush eye with water for 15 minutes. Get medical attention if irritation occurs.

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

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

**Notes to Physician:** Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

#### Flammable Properties

**Flashpoint (°C/°F):** -18 to -22 °C/-0.4 to -7.6 °F

**Flash Point Tested according to:**  
Closed cup

**Lower Explosion Limit (%):** 1-1.1%

**Upper Explosion Limit (%):** 7.4-8.0%

**Autoignition Temperature (°C/°F):** 224-252 °C/435.2-485.6 °F

**Suitable Extinguishing Media:** Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray mist or foam.

<b>Unsuitable Extinguishing Media:</b>	Do not use a solid (straight) water stream as it may scatter and spread fire.
<b>Hazardous Combustion Products:</b>	Carbon monoxide; Carbon dioxide
<b>Specific hazards:</b>	Extremely flammable May be ignited by heat, sparks or flames Container explosion may occur under fire conditions or when heated Vapor may travel considerable distance to source of ignition and flash back Vapors may form explosive mixtures with air Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks) Fire may produce irritating, corrosive and/or toxic gases
<b>Special Protective Equipment for Firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
<b>Specific Methods:</b>	Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions:

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

### Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not let this chemical enter the environment. Prevent entry into waterways, sewers, basements or confined areas. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

### Methods for Cleaning Up:

Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Handling

#### Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

#### Safe Handling Advice:

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

## Storage

### Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

### Incompatible Materials:

Oxidizing agents. Dinitrogen tetraoxide.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

### Personal Protective Equipment

**Eye protection:** Goggles. Safety glasses with side-shields.

**Skin and body protection:** Chemical resistant apron. Long sleeved clothing. Gloves.

**Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

### National occupational exposure limits

#### United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Hexane - 110-54-3	500 ppm TWA 1800 mg/m <sup>3</sup> TWA	50 ppm TWA 180 mg/m <sup>3</sup> TWA	50 ppm TWA	None
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane) - Mixture	None	None	None	None
Methylcyclopentane - 96-37-7	None	None	None	None

#### Canada

Components	Alberta	British Columbia	Ontario	Quebec
Hexane 110-54-3	50 ppm TWA 176 mg/m <sup>3</sup> TWA	20 ppm TWA	50 ppm TWA	50 ppm TWAEV 176 mg/m <sup>3</sup> TWAEV
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane) Mixture	None	None	None	None
Methylcyclopentane 96-37-7	None	None	None	None

#### Australia and Mexico

Components	Australia	Mexico
Hexane 110-54-3	72 mg/m <sup>3</sup> TWA 20 ppm TWA	50 ppm TWA 176 mg/m <sup>3</sup> TWA
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane) Mixture	None	None
Methylcyclopentane 96-37-7	None	None

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:**

Liquid.

**Appearance:**

No information available

**Color:**

Clear. Colorless.

**Odor:**

Gasoline-like.

**Molecular/Formula weight:**

86.18

**Taste**

No information available

**Flash point (°C):**

-22

**Lower Explosion Limit (%):**

1-1.1%

**Upper Explosion Limit (%):**

7.4-8.0%

**Autoignition Temperature (°C/°F):**

224-252 °C/435.2-485.6 °F

**Melting point/range(°C/°F):**

-95 °C/-139 °F

**Boiling point/range(°C/°F):**

66-70 °C/151-158 °F

**pH:**

No information available

**Specific gravity:**

0.66-0.68

**Density (g/cm<sup>3</sup>):**

No information available

**Decomposition temperature(°C/°F):**

No information available

**Bulk density:**

No information available

**Vapor pressure @ 20°C (kPa):**

16.5-18.7

**Evaporation rate:**

No information available

**Vapor density:**

2.97

**VOC content (g/L):**

660-680

**Odor threshold (ppm):**

130

**Partition coefficient****(n-octanol/water):**

No information available

**Miscibility:**

Immiscible with water

Miscible with alcohol

Miscible with Chloroform

Miscible with Ether

Miscible with Acetone

**Solubility:**

Insoluble in water

## 10. STABILITY AND REACTIVITY

**Stability:**

Stable at normal conditions

**Conditions to avoid:**

Heat. Ignition sources. Incompatible materials.

**Incompatible Materials:**

Oxidizing agents. Dinitrogen tetraoxide.

**Hazardous decomposition products:**

Carbon monoxide. Carbon dioxide. When heated to decomposition it emits acrid smoke and irritating fumes.

**Possibility of Hazardous Reactions:**

It can react vigorously, violently or explosively with oxidizers

Mixtures of Hexane and dinitrogen tetraoxide may explode at 28 deg C

**Polymerization:**

Hazardous polymerisation does not occur

**Corrosivity:**

No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity****Component Information**

Hexane - 110-54-3

**LD50/oral/rat** = 25 g/kg Oral LD50 Rat  
**LD50/oral/mouse** = 5000 mg/kg  
**LD50/dermal/rat** = No information available  
**LD50/dermal/rabbit** = 3000 mg/kg Dermal LD50Rabbit  
**LC50/inhalation/rat** = 48000 ppm Inhalation LC50 Rat 4 h  
**LC50/inhalation/mouse** = 15000 mg/m<sup>3</sup> 2 h  
**Other LD50 or LC50information** = No information available

Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane) - Mixture

**LD50/oral/rat** = No information available  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rat** = No information available  
**LD50/dermal/rabbit** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50information** = No information available

Methylcyclopentane - 96-37-7

**LD50/oral/rat** = No information available  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rat** = No information available  
**LD50/dermal/rabbit** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50information** = No information available

**Product Information**

**LC50/inhalation/rat** No information available  
**LC50/Inhalation/mouse** No information available  
**LD50/dermal/rabbit** No information available  
**LD50/dermal/rat** No information available  
**LD50/oral/mouse** = No information available  
**LD50/oral/rat** = No information available

**Local Effects**

**Skin irritation:** Irritating to skin. Symptoms may include redness, increased blood flow, swelling, pain, itching, painful burning, followed by blister formation.

**Eye irritation:** May cause eye irritation. Mild eye irritation.

**Inhalation:** May cause irritation of respiratory tract. Inhalation of high concentrations may cause asphyxiation. Inhalation of high concentrations of vapors may cause dizziness or suffocation. May affect respiration (respiratory depression). Symptoms may include coughing and shortness of breath. It may cause pulmonary edema. May cause nausea, vomiting. May cause anorexia or weight loss. It may affect behavior/central nervous system (general anesthetic, central nervous system depression, headache, lightheadedness, vertigo, confusion, memory loss, hallucinations, excitement, euphoria). May affect the peripheral nervous system (peripheral neuropathy, numbness of the extremities, muscle weakness, paralysis). May affect the brain. May cause cardiovascular system effects.

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause abdominal pain. Aspiration hazard if swallowed. Aspiration into the lungs can cause chemical pneumonitis. Aspiration may lead to pulmonary edema. May affect behavior/central nervous system (ataxia). May affect behavior/central nervous system (somnia).

**Sensitization:** No information available

### Chronic Toxicity

**Chronic Toxicity** Prolonged or repeated inhalation may affect metabolism (weight loss). Prolonged or repeated inhalation may affect the brain. Prolonged or repeated inhalation may affect the kidneys. Prolonged or repeated inhalation may affect the liver. Prolonged or repeated ingestion may affect the liver. Prolonged or repeated ingestion may affect behavior/central nervous system. Prolonged or repeated inhalation or ingestion may affect the peripheral nervous system (weakness, paresthesia - a tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles) generally of the hands and feet (extremities)). Prolonged or repeated inhalation or ingestion may affect the peripheral nervous system (muscle weakness, peripheral neuropathy with paresthesia - a tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles) generally of the hands and feet (extremities)), paralysis). Prolonged or repeated inhalation may affect the spinal cord. Prolonged or repeated ingestion may affect the blood (changes in serum composition, leukopenia). Prolonged or repeated skin contact may cause dermatitis and defatting, dryness, and cracking of the skin. Skin changes such as coldness, redness, and roughness may occur.

**Carcinogenic effects:** May cause cancer based on animal test data. Tumorigenic agent by RTECS criteria.

Components	NTP	IARC	OSHA HCS - Carcinogens	ACGIH - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Hexane	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Methylcyclopentane	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects:** May affect genetic material  
Animal experiments showed mutagenic effects

**Reproductive Effects:** May cause adverse reproductive effects based on animal data  
Possible risk of impaired fertility  
May cause adverse developmental effects based on animal data

**Teratogenic Effects:** May cause birth defects (teratogenic effects) based on animal test data.

**Target Organs:** Skin. Central nervous system. Peripheral nervous system. Respiratory system.

## 12. ECOLOGICAL INFORMATION

### ECOTOXICITY

**Toxicity to terrestrial and aquatic plants and animals:** Information given is based on data on the components and the ecotoxicology of similar products

**Ecotoxicity effects:** Aquatic environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



**Aquatic toxicity:***Hexane - 110-54-3***Freshwater Fish Species Data:** 2.1-2.98 mg/L LC50 Pimephales promelas 96 h flow-through 1**Water Flea Data:** 1000 mg/L EC50 Daphnia magna 24 h**Mobility:** No information available**Persistence and degradability:** No information available**Bioaccumulative potential:** No information available**13. DISPOSAL CONSIDERATIONS****Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Hexane	None	None	None	None
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	None	None	None	None
Methylcyclopentane	None	None	None	None

**14. TRANSPORT INFORMATION****DOT**

**UN-No:** UN1208  
**Proper Shipping Name:** Hexanes  
**Hazard Class:** 3  
**Packing Group:** None  
**Subsidiary Risk:** Not applicable  
**Marine Pollutant:** No data available  
**ERG No:** 128  
**DOT RQ (lbs):** No information available

**TDG (Canada)**

**UN-No:** UN1208  
**Proper Shipping Name:** Hexanes  
**Hazard Class:** 3  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Description:** No information available

**ADR**

**UN-No:** UN1208  
**Proper Shipping Name:** Hexanes  
**Hazard Class:** 3  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Classification Code:** No information available  
**Description:** No information available  
**CEFIC Tremcard No:** No information available

**IMO / IMDG**

**UN-No:** UN1208  
**Proper Shipping Name:** Hexanes  
**Hazard Class:** 3  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Description:** No information available  
**IMDG Page:** No information available  
**Marine Pollutant:** No information available  
**EMS:** F-E  
**MFAG:** No information available  
**Maximum Quantity:** No information available

**RID**

**UN-No:** UN1208  
**Proper Shipping Name:** Hexanes  
**Hazard Class:** 3  
**Packing Group:** II  
**Subsidiary Risk:** 3  
**Classification Code:** No information available  
**Description:** No information available

**ICAO**

**UN-No:** UN1208  
**Proper Shipping Name:** Hexanes  
**Hazard Class:** 3  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Description:** No information available

**IATA**

**UN-No:** UN1208  
**Proper Shipping Name:** Hexanes  
**Hazard Class:** 3  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**ERG Code:** 3H  
**Description:** No information available

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Hexane	Present	Present	Present KE-18626	Present (2)-6	Present	Present	Present 203-777-6
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	Not Listed	Not present	Not present	Not present	Not present	Not present	Not present
Methylcyclopentane	Present	Present	Present KE-23724	Present (9)-2602	Present	Present	Present 202-503-2

**U.S. Regulations**

Hexane

Massachusetts RTK: Present

Hexane

New Jersey RTK Hazardous Substance List: Present

New Jersey (EHS) List: Present

New Jersey - Discharge Prevention - List of Hazardous Substances: Present

Pennsylvania RTK: Present

RI RTK - Hazardous Substances List: Present

Minnesota - Hazardous Substance List: Present

New York Release Reporting - List of Hazardous Substances:

1 lb RQ

Louisiana Reportable Quantity List for Pollutants: 5000lbRQapplies to unauthorized emissions based on total mass emitted into or onto all media within any consecutive 24-hour period

1000lbRQapplies to unauthorized emissions based on total mass emitted into the atmosphere

Methylcyclopentane

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: Present

Pennsylvania RTK: Present

RI RTK - Hazardous Substances List: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Hexane	Not Listed	Not Listed	Not Listed	Not Listed
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	Not Listed	Not Listed	Not Listed	Not Listed
Methylcyclopentane	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Hexane	5000 lb final RQ 2270 kg final RQ	None	None	None	1.0 % de minimis concentration
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	None	None	None	None	None
Methylcyclopentane	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Hexane	Not Applicable	Not Applicable
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	Not Applicable	Not Applicable
Methylcyclopentane	Not Applicable	06/20/1985 11/09/1993

Canada

WHMIS hazard class:

B2 Flammable liquid

D2A Very toxic materials

D2B Toxic materials

**Hexane**

B2 D2A D2B

**Canada Controlled Products Regulation:**

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Hexane	1 %

**Inventory**

Components	Canada (DSL)	Canada (NDSL)
Hexane	Present	Not Listed
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	Not Listed	Not Listed
Methylcyclopentane	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Hexane	Not listed	Not listed
Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)	Not listed	Not listed
Methylcyclopentane	Not listed	Not listed

**EU Classification****R-phrase(s)**

R11 - Highly flammable.

R38 - Irritating to skin.

R62 - Possible risk of impaired fertility.

R65 - Harmful: may cause lung damage if swallowed.

R67 - Vapors may cause drowsiness and dizziness.

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S -phrase(s)**

S 9 - Keep container in a well-ventilated place.

S16 - Keep away from sources of ignition - No smoking.

S29 - Do not empty into drains.

S33 - Take precautionary measures against static discharges.

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

S36/37 - Wear suitable protective clothing and gloves.

Components	Classification	Concentration Limits:	Safety Phrases
Hexane	F; R11 Xi; R38 N; R51-53 Repr.Cat.3; R62 Xn; R65-48/20 R67	5%≤C: Xn; R48/20	S2 S9 S16 S29 S33 S36/37 S61 S62

Hexane, other isomers (predominately 2-Methylpentane and 3-Methylpentane)		No information	
Methylcyclopentane		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

F - Highly flammable.

Xn - Harmful.

N - Dangerous for the environment.



## 16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

**Preparation Date:** 10-Feb-2014

**Reason for revision:** Not applicable

**Prepared by:** Sonia Owen

**Literature reference:** No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.