Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Cyclohexene</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Catalog Number(s).</strong></td>
<td>C1464</td>
</tr>
<tr>
<td><strong>CAS#</strong></td>
<td>110-83-8</td>
</tr>
<tr>
<td><strong>RTECS</strong></td>
<td>GW2500000</td>
</tr>
<tr>
<td><strong>TSCA</strong></td>
<td>TSCA 8(b) inventory: Cyclohexene</td>
</tr>
<tr>
<td><strong>CI#</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Manufacturer**
SPECTRUM CHEMICAL MFG. CORP.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

**Commercial Name(s)**
Not available.

**Synonym**
Not available.

**Chemical Name**
Not available.

**Chemical Family**
Not available.

**Chemical Formula**
C6H10

**Supplier**
SPECTRUM CHEMICAL MFG. CORP.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

**IN CASE OF EMERGENCY**
CHEMTREC (24hr) 800-424-9300
CALL (310) 516-8000

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Cyclohexene</td>
<td>110-83-8</td>
<td>1015</td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

**Toxicological Data on Ingredients**
Cyclohexene
LD50: Not available.
LC50: Not available.

Section 3. Hazards Identification

**Potential Acute Health Effects**
Very hazardous in case of ingestion. Hazardous in case of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (irritant).

**Potential Chronic Health Effects**
Very hazardous in case of ingestion.
Hazardous in case of eye contact (irritant), of inhalation.
Slightly hazardous in case of skin contact (irritant).
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance is toxic to lungs.
Repeated or prolonged exposure to the substance can produce target organs damage.

Continued on Next Page
## Section 4. First Aid Measures

<table>
<thead>
<tr>
<th><strong>Eye Contact</strong></th>
<th>Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skin Contact</strong></td>
<td>After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.</td>
</tr>
<tr>
<td><strong>Serious Skin Contact</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>Allow the victim to rest in a well ventilated area. Seek immediate medical attention.</td>
</tr>
<tr>
<td><strong>Serious Inhalation</strong></td>
<td>Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.</td>
</tr>
<tr>
<td><strong>Serious Ingestion</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

## Section 5. Fire and Explosion Data

| **Flammability of the Product** | Flammable. |
| **Auto-Ignition Temperature** | 244°C (471.2°F) |
| **Flash Points** | CLOSED CUP: -12°C (10.4°F). (Setaflash) |
| **Flammable Limits** | LOWER: 1.2%  UPPER: 5% |
| **Products of Combustion** | These products are carbon oxides (CO, CO2). |
| **Fire Hazards in Presence of Various Substances** | Flammable in presence of open flames and sparks. Slightly flammable to flammable in presence of oxidizing materials. |
| **Fire Fighting Media and Instructions** | Flammable liquid, insoluble in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. |
| **Special Remarks on Fire Hazards** | Not available. |
| **Special Remarks on Explosion Hazards** | Not available. |

## Section 6. Accidental Release Measures

| **Small Spill** | Absorb with an inert material and put the spilled material in an appropriate waste disposal. |
| **Large Spill** | Flammable liquid, insoluble in water. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities. |

Continued on Next Page
Section 7. Handling and Storage

Precautions
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe gas/fumes/vapour/spray. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible.

Storage
Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C (100°F).

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits
TWA: 300 (ppm) from ACGIH (TLV)
TWA: 1015 (mg/m³) from ACGIH

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance
Liquid.

Molecular Weight
82.15 g/mole

pH (1% soln/water)
Not applicable.

Boiling Point
82.8°C (181°F)

Melting Point
-103.7°C (-154.7°F)

Critical Temperature
Not available.

Specific Gravity
0.8098 (Water = 1)

Vapor Pressure
67 mm of Hg (@ 20°C)

Vapor Density
2.8 (Air = 1)

Vapour Threshold
Not available.

Water/Oil Dist. Coeff.
Not available.

Ionicity (in Water)
Not available.

Dispersion Properties
Not available.

Solubility
Insoluble in cold water.
### Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Not available.</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Not available.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Non-corrosive in presence of glass.</td>
</tr>
</tbody>
</table>

#### Polymerization
No.

#### Special Remarks on Reactivity
Not available.

#### Special Remarks on Corrosivity
Not available.

##### Instability Temperature
Conditions of Instability
Incompatibility with various substances
Corrosivity

#### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Eye contact. Inhalation. Ingestion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to Animals</td>
<td>LD50: Not available. LC50: Not available.</td>
</tr>
<tr>
<td>Chronic Effects on Humans</td>
<td>The substance is toxic to lungs.</td>
</tr>
<tr>
<td>Other Toxic Effects on Humans</td>
<td>Very hazardous in case of ingestion. Hazardous in case of inhalation. Slightly hazardous in case of skin contact (irritant).</td>
</tr>
</tbody>
</table>

#### Special Remarks on Toxicity to Animals
Not available.

#### Special Remarks on Chronic Effects on Humans
Not available.

#### Special Remarks on other Toxic Effects on Humans
Not available.

#### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD5 and COD</td>
<td>Not available.</td>
</tr>
<tr>
<td>Products of Biodegradation</td>
<td>Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.</td>
</tr>
<tr>
<td>Toxicity of the Products of Biodegradation</td>
<td>The products of degradation are more toxic.</td>
</tr>
</tbody>
</table>

#### Special Remarks on the Products of Biodegradation
Not available.
Section 13. Disposal Considerations

Waste Disposal

Section 14. Transport Information

DOT Classification
Class 3: Flammable liquid.

Identification
: Cyclohexene : UN2256  PG: II

Special Provisions for Transport
Not available.

DOT (Pictograms)

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
Pennsylvania RTK: Cyclohexene
Massachusetts RTK: Cyclohexene
TSCA 8(b) inventory: Cyclohexene

California Proposition 65 Warnings

Other Regulations

Other Classifications
WHMIS (Canada) CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
DSCL (EEC) R11- Highly flammable. R36- Irritating to eyes.

National Fire Protection Association (U.S.A.)

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Specific hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

HMIS (U.S.A.)

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

Continued on Next Page
Section 16. Other Information

| MSDS Code  | C5120          |
| References | Not available. |
| Other Special Considerations | Not available. |

Verified by Sonia Owen. 

CALL (310) 516-8000

Notice to Reader

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. 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 Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.