

# SAFETY DATA SHEET



Colonial Chemical Solutions, Inc.

## SECTION 1 - COMPANY AND PRODUCT IDENTIFICATION

### PRODUCT

**Product Name:** CYCLOHEXANE  
**Control Number:** 00042  
**Product Description:** Cycloparaffinic Hydrocarbon

### COMPANY IDENTIFICATION

**Supplier:** COLONIAL CHEMICAL SOLUTIONS, INC.  
916 West Lathrop Avenue  
Savannah, Georgia 31415

**24 Hour Emergency Telephone:** (800)-424-9300 CHEMTREC  
**General Information:** (912) 236-1331

## SECTION 2- HAZARDS IDENTIFICATION

### GHS Classification:

#### [ Health ]

Acute toxicity, Inhalation Category 4  
Acute toxicity, Oral Category 4  
Skin irritation Category 2  
Aspiration hazard Category 1

#### [ Environmental ]

Acute Aquatic Toxicity Category 2  
Chronic aquatic toxicity Category 2

#### [ Physical ]

Flammable Liquid Category 2

### GHS Label elements, including precautionary statements

#### Pictograms



**Signal Word:** Warning

#### Hazard statement(s)

H225 Highly flammable liquid and vapor.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

## SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%WT
Cyclohexane	100-82-7	100

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## SECTION 4 - FIRST AID MEASURES

### FIRST AID PROCEDURES:

**Eye:** Flush eyes with running water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get immediate medical attention.

**Skin:** To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. Get medical attention if any symptoms develop.

**Ingestion:** If swallowed, do not induce vomiting. Give the person a glass of water or milk to drink and get immediate medical attention. Never give anything by mouth to an unconscious person.

**Inhalation:** Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

## SECTION 5 - FIRE FIGHTING MEASURES

**Extinguishing Media:** To extinguish flames use dry chemical, carbon dioxide or fire fighting foam..

**Fire Fighting Procedures:** Flammable liquid and vapor! As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Vapors are heavier than air and may travel to a source of ignition and flash back. This liquid floats on water and may travel to a source of ignition and spread fire.

**Fire and Explosion Hazards:** Extremely flammable. Containers can rupture and explode under fire conditions due to pressure and vapor buildup. Vapors may form explosive mixture with air. Vapors may travel across the ground and reach an ignition source.

## SECTION 6 - ACCIDENTAL RELEASE and DISPOSAL MEASURES

**Spills:** Provide adequate ventilation. Evacuate all non-essential personnel from the spill area. Eliminate all ignition sources. Suitable protective clothing should be worn. Shut off or plug source of spill. Small spills: absorb on inert media and collect into suitable container.

Large Spills: Dike spill area to contain liquid. Salvage as much re-useable liquid as possible into a suitable container. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations

## SECTION 7 - STORAGE AND HANDLING

**Handling:** Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Keep container closed and tightly sealed when not in use. Avoid contact with skin and eyes.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

**Storage:** This material is a static accumulator. Use non-sparking tools. Store in a cool, dry, ventilated area, away from incompatible substances. Store only in approved properly labeled containers. Containers should be grounded and bonded.

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## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering Controls:** A system of local and/or general mechanical ventilation to prevent excessive vapor accumulation is recommended to keep employee exposure below exposure limits.

**Exposure Limits:** Cyclohexane 50 ppm ACGIH; 100 ppm OSHA

### Personal Protective Equipment (PPE):

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

**Skin:** If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

**Clothing:** Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

**Respirators:** Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.

## SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

**Flash Point:** -0.4 °F

**Autoignition Temperature:** 500 °F

**Boiling Point:** 177 °F

**Melting Point/Freezing Point:** 37 °F

**Vapor Pressure:** 169 mmHg

**Vapor Density (Air-1):**

**Odor/Appearance:** Clear colorless liquid

**Flammability Limits:** Lower: 1 Upper: 9

**Specific Gravity:** 0.78

**Volatile %:** 100

**Evaporation Rate (Water=1):** No available data

**pH:** Not Applicable

**Solubility in Water:** No available data

## SECTION 10 - STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal use and temperature conditions.

**Conditions to Avoid:** Heat, flames and sparks. Extremes of temperature and direct sunlight.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Polymerization:** Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Signs and Symptoms of Overexposure:

**Eye Contact:** Not expected to cause prolonged or significant eye irritation.

**Skin Contact:** Contact with the skin causes irritation. Prolonged or repeated skin contact may cause drying or defating of the skin. Symptoms may include pain, itching, discoloration, swelling, and blistering.

**Ingestion:** This material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death.

**Inhalation:** Breathing of high vapor concentrations may cause dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness. The vapor or fumes from this material may cause respiratory irritation.

### Acute oral toxicity:

Cyclohexane: LD50 rat: 12,705 mg/kg

### Acute inhalation toxicity:

Cyclohexane: LD50 rat: 34,000 mg/l 4h

### Acute dermal toxicity:

Cyclohexane: LD50 rabbit: > 2,000 mg/kg

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## SECTION 12 - ECOLOGICAL INFORMATION

**Aquatic Toxicity:** Toxicity to fish LC50 - *Lepomis macrochirus* (Bluegill) - 34.7 mg/l - 96.0 h

**Bio-accumulative potential:** This product is readily biodegradable.

**Mobility:** Accidental spillage may lead to penetration in the soil and contamination of groundwater.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14 - TRANSPORTATION

### U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

**Proper Shipping Name:** Cyclohexane  
**Hazard Class:** 3, Flammable  
**UN Number:** 1145  
**Packaging Group:** 2

## SECTION 15 - REGULATORY INFORMATION

### US FEDERAL REGULATIONS

#### Comprehensive Environmental Response and Liability Act (CERCLA)

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material is 1000 pounds. If appropriate, immediately report to the National Response Center (800/424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies.

**Toxic Substance Control Act (TSCA):** All components of this product are listed on the TSCA inventory list.

#### SARA Section 311/312 (40 CFR 370) Hazard Categories:

Fire Hazard, Acute Health Hazard

**SARA Section 313 (40 CFR 372) Hazard Categories:** The following components are subject to reporting levels established by SARA Title III, Section 313: Cyclohexane

**Clean Water Act:** This product contains no chemicals that are listed under the CWA.

**Clean Air Act:** This product contains no chemicals that are listed under the CAA.

**California Prop 65:** This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

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<b>SECTION 16 · OTHER INFORMATION</b>
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**MSDS Revision Date:** September 2014

**National Fire Protection Association (NFPA) Ratings:** This information is intended solely for the use of individuals trained in the NFPA system.

**Health:** 2  
**Flammability:** 3  
**Reactivity:** 0

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