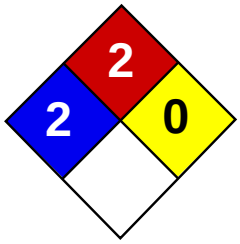

Material Safety Data Sheet
Hexylene Glycol MSDS

Section 1: Chemical Product and Company Identification

Product Name: Hexylene Glycol

Catalog Codes: SLH2446

CAS#: 107-41-5

RTECS: SA0810000

TSCA: TSCA 8(b) inventory: Hexyleneglycol

CI#: Not available.

Synonym: 2-Methyl-2,4-pentanediol; 2,4-Dihydroxy-2-methylpentane; Diolane; alpha, alpha, alpha'-Trimethyltrimethylene glycol

Chemical Formula: C6-H14-O2

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Hexylene Glycol	107-41-5	100

Toxicological Data on Ingredients: Hexylene Glycol: ORAL (LD50): Acute: 3700 mg/kg [Rat]. 3097 mg/kg [Mouse]. 3200 mg/kg [Rabbit]. DERMAL (LD50): Acute: 8560 mg/kg [Rabbit].

Section 3: Hazards Identification

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

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, the nervous system, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

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

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: 303.69 (579 F) - 305.85°C (582.5°F)

Flash Points:
OPEN CUP: 93.333°C (200°F) (Lewis, 1993); 96.1 C (205 F) (Lewis, 1996); 98.3 C (209 F) (NIOSH, 1997); 102 C (215 F) (NFPA, 1994) .

Flammable Limits: LOWER: 1.2% - 1.3% UPPER: 8.1% - 9.0%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

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. Gloves.

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:
CEIL: 125 (mg/m3) from OSHA (PEL) [United States] CEIL: 25 (ppm) from OSHA (PEL) [United States] CEIL: 125 (mg/m3) from NIOSH [United States] CEIL: 25 (ppm) from NIOSH [United States] CEIL: 25 (ppm) from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Sweetish.

Taste: Not available.

Molecular Weight: 118.18 g/mole

Color: Colorless.

pH (1% soln/water): Not available.

Boiling Point: 197°C (386.6°F) - 198 C

Melting Point: -50°C (-58°F)

Critical Temperature: Not available.

Specific Gravity: 0.9254 @ 17 C; 0.9234 @ 20 C (Water = 1)

Vapor Pressure: 0.05 mm of Hg (@ 20°C)

Vapor Density: 4.1 (Air = 1)

Volatility: Not available.

Odor Threshold: 50 ppm

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility:
Easily soluble in cold water. Soluble in diethyl ether. Soluble in alcohol, lower aliphatic hydrocarbons. Soluble in a variety of organic solvents. Miscible with fatty acids.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, ignition sources, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:
Acute oral toxicity (LD50): 3097 mg/kg [Mouse]. Acute dermal toxicity (LD50): 8560 mg/kg [Rabbit].

Chronic Effects on Humans: May cause damage to the following organs: kidneys, the nervous system, liver.

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (sensitizer), of ingestion.

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:
Acute Potential Health Effects: Skin: Causes moderate skin irritation with redness and swelling. May cause dermatitis. It may be absorbed by the skin. Eyes: Direct contact with liquid causes moderate to severe eye irritation experienced as discomfort, pain, excess blinking, and tear production, marked excess redness, and swelling of conjunctiva. May cause cornal injury. Vapors may cause eye irritation. Inhalation: May cause irritation of the respiratory tract with mild burning sensation in the nose, throat and lungs, coughing, wheezing, shortness of breath, pulmonary edema. Breathing of high concentration of vapors may also cause central nervous system (CNS) depression resulting in dizziness, light-headnedness, headache, nausea, loss of coordination. Continued inhalation may result in unconsciousness and death. Ingestion: May cause digestive tract (mouth, throat, and esophagus) irritation. May cause nausea, vomiting and diarrhea. May affect behavior/central nervous system (CNS excitation followed by profound CNS depression - dizziness, incoordination, headache, drowsiness, memory loss, withdrawl, irritability, fatigue, sleep disturbances). It may also affect the peripherial nervous system and cause muscle weakness and "pins and needles" sensation). Chronic Potential Health Effects: Skin: Repeated or prolonged skin contact may cause dermatitis, skin sensitization. Ingestion: Repeated or prolonged ingestion may cause liver and kidney damage. It may also affect behavior/central nervous system/peripherial nervous system and cause symptoms similar to that of acute ingestion.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
Illinois toxic substances disclosure to employee act: Hexylene Glycol Pennsylvania RTK: Hexylene Glycol Minnesota: Hexylene Glycol Massachusetts RTK: Hexylene Glycol Massachusetts spill list: Hexylene Glycol New Jersey: Hexylene Glycol TSCA 8(b) inventory: Hexylene Glycol

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R36/38- Irritating to eyes and skin. S15- Keep away from heat. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 2

Reactivity: 0

Personal Protection: h

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

Health: 2

Flammability: 2

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/09/2005 05:44 PM

Last Updated: 05/21/2013 12:00 PM