SECTION 1. IDENTIFICATION

Product identifier used on the label

: Hexylene Glycol

Product Code(s)

: None reported.

Recommended use of the chemical and restrictions on use

: Solvent used for coatings, catalyst, textiles and others
  Use pattern: Professional Use Only
  Recommended restrictions: None known.

Chemical family

: Glycols

Name, address, and telephone number of the supplier:

Comet Chemical Company Ltd.
3463 Thomas Street
Innisfill, ON, Canada, L9S 3W4
705-436-5580

24 Hr. Emergency Tel # : TERRRAPURE ENVIRONMENTAL : 800-567-7455

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Clear liquid. Odorless.

This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:

Serious eye damage/eye irritation - Category 2A

Label elements

Hazard pictogram(s)

Signal Word

Warning!

Hazard statement(s)

Causes serious eye irritation.

Precautionary statement(s)

Wash thoroughly after handling.
Wear eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
SAFETY DATA SHEET

Other hazards
Other hazards which do not result in classification: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be mildly irritating to skin, eyes and respiratory system.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexylene glycol</td>
<td>2-Methyl-2,4-pentanediol</td>
<td>107-41-5</td>
<td>100.00</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST-AID MEASURES

Description of first aid measures
- **Ingestion**: Do NOT induce vomiting. Have victim rinse mouth with water, then give one to two glasses of water to drink. Never give anything by mouth to an unconscious person. Call a physician.
- **Inhalation**: If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Obtain medical attention if symptoms develop and persist.
- **Skin contact**: Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. If irritation or symptoms develop, seek medical attention.
- **Eye contact**: For eye contact, flush with running water for at least 15 minutes. If irritation persists, seek prompt medical attention.

Most important symptoms and effects, both acute and delayed
- Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct skin contact may cause slight or mild, transient irritation. Inhalation of high concentrations may cause dizziness, disorientation, incoordination, narcosis, nausea or narcotic effects. Prolonged overexposure may cause slight liver and kidney effects, such as increased organ weights.

Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media
- **Suitable extinguishing media**: Use water fog or fine spray, foams, carbon dioxide or dry chemical.
- **Unsuitable extinguishing media**: Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability
- Vapors are heavier than air and may spread along floors. Vapors may travel considerable distance to a source of ignition and flash back. Burning may produce irritating, toxic and obnoxious fumes.

Flammability classification (OSHA 29 CFR 1910.106)
- Not classified as flammable.

Hazardous combustion products
- Carbon oxides

Special protective equipment and precautions for firefighters
- **Protective equipment for fire-fighters**: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Special fire-fighting procedures
SAFETY DATA SHEET

Personal precautions, protective equipment and emergency procedures

- Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

Environmental precautions

- Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

Methods and material for containment and cleaning up

- Ventilate area of release. Stop spill or leak at source if safely possible. Dike for water control. Use only non-sparking tools and equipment in the clean-up process. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13).

Special spill response procedures

- In case of a transportation accident, contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887.

US CERCLA Reportable quantity (RQ): None.

Precautions for safe handling

- Use only in well-ventilated areas. Wear protective equipment during handling. Avoid breathing vapours or mists. Avoid contact with eyes, skin and clothing. Keep away from extreme heat and flame. Keep away from incompatibles. Keep containers tightly closed when not in use. Wash thoroughly after handling.

Conditions for safe storage

- Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.

Incompatible materials

- Oxidizing agents Reducing agents Acids Chlorates. Anhydrides

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>STEL</td>
</tr>
<tr>
<td>Hexylene glycol</td>
<td>25 ppm (Ceiling)</td>
<td>N/Av</td>
</tr>
<tr>
<td></td>
<td>25 ppm (Ceiling) (final rule limit)</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Exposure controls

Ventilation and engineering measures

- Use in a well-ventilated area. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection

- If airbourne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Advice should be sought from respiratory protection specialists. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02.
Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.

Chemical goggles are recommended when there is a potential for splashing.

Wear sufficient clothing to prevent skin contact. Depending on conditions of use, an impervious apron should be worn. An eyewash station and safety shower should be made available in the immediate working area.

Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse. Handle in accordance with good industrial hygiene and safety practice.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance**: Clear liquid.

**Odour**: Odorless

**Odour threshold**: N/Av

**pH**: Not available.

**Melting/Freezing point**: -50°C (-58°F)

**Initial boiling point and boiling range**: 198°C (388°F)

**Flash point**: 98°C (208.4°F)

**Flashpoint (Method)**: Cleveland closed cup

**Evaporation rate (BuAe = 1)**: 1

**Flammability (solid, gas)**: Not applicable.

**Lower flammable limit (% by vol.)**: 1.3%

**Upper flammable limit (% by vol.)**: 7.4%

**Oxidizing properties**: None known.

**Explosive properties**: Not explosive

**Vapour pressure**: 0.05 mmHg

**Vapour density**: 4.1

**Relative density / Specific gravity**: 0.923

**Solubility in water**: Soluble (100%)

**Other solubility(ies)**: Soluble in most organic solvents.

**Partition coefficient: n-octanol/water or Coefficient of water/oil distribution**: <1

**Auto-ignition temperature**: 300°C (572°F)

**Decomposition temperature**: Not available.

**Viscosity**: 34 mPas

**Volatiles (% by weight)**: Not available.

**Volatile organic Compounds (VOC's)**: N/Av

**Absolute pressure of container**: N/Av

**Flame projection length**: N/Av

**Other physical/chemical comments**: Molecular Weight: 118.06 g/mol
SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive.
Chemical stability: Material is stable under normal conditions.
Possibility of hazardous reactions: Hazardous polymerization does not occur.
Conditions to avoid: Avoid excessive heat, sparks and open flame. Avoid contact with incompatible materials. Do not use in areas without adequate ventilation. Exposure to moisture. Take precautionary measures against static discharge.
Incompatible materials: Oxidizing agents Reducing agents Acids Chlorates. Anhydrides
Hazardous decomposition products: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation: Inhalation of high concentrations may cause dizziness, disorientation, incoordination, narcosis, nausea or narcotic effects.
Sign and symptoms ingestion: Ingestion may irritate digestive tract and cause nausea, vomiting and diarrhea.
Sign and symptoms skin: Causes mild skin irritation. Symptoms may include mild redness and swelling.
Sign and symptoms eyes: Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.

Potential Chronic Health Effects: Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Mutagenicity: Not expected to be mutagenic in humans.
Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
Reproductive effects & Teratogenicity: Not expected to cause reproductive effects.
Sensitization to material: Not expected to be a skin or respiratory sensitizer.
Specific target organ effects: This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Medical conditions aggravated by overexposure: None known.
Synergistic materials: Not available.
Toxicological data: See below for toxicological data on the substance.
SAFETY DATA SHEET

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LCso (4hr) inh, rat</th>
<th>LDso (Oral, rat)</th>
<th>LDso (Rabbit, dermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexylene glycol</td>
<td>N/Av</td>
<td>3690 mg/kg</td>
<td>12 260 mg/kg</td>
</tr>
</tbody>
</table>

Other important toxicological hazards:

None known or reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Do not allow material to contaminate ground water system. See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Fish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LCso / 96h / NOEC / 21 day / M Factor</td>
</tr>
<tr>
<td>Hexylene glycol</td>
<td>107-41-5</td>
<td>8510 mg/L (Mosquito fish) / N/Av / None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ECso / 48h / NOEC / 21 day / M Factor</td>
</tr>
<tr>
<td>Hexylene glycol</td>
<td>107-41-5</td>
<td>2800 mg/L (Daphnia magna) / N/Av / None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ECso / 96h or 72h / NOEC / 96h or 72h / M Factor</td>
</tr>
<tr>
<td>Hexylene glycol</td>
<td>107-41-5</td>
<td>&gt; 429 mg/L/72hr (Green algae) / 429 mg/L/72hr / None.</td>
</tr>
</tbody>
</table>

Persistence and degradability:

Readily biodegradable.

Bioaccumulation potential:

No information available.

<table>
<thead>
<tr>
<th>Components</th>
<th>Partition coefficient n-octanol/aque (log Kow)</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexylene glycol (CAS 107-41-5)</td>
<td>0.58</td>
<td>3.162</td>
</tr>
</tbody>
</table>

Mobility in soil:

No information available.

Other Adverse Environmental effects:

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal:

Handle waste according to recommendations in Section 7.

Methods of Disposal:

Dispose in accordance with all applicable federal, state, provincial and local regulations.
### SECTION 14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class(es)</th>
<th>Packing Group</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>49CFR/DOT</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>49CFR/DOT Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td>None.</td>
<td>Not regulated.</td>
<td>Not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>TDG Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>None.</td>
<td>Not regulated.</td>
<td>not regulated</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>IMDG Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Special precautions for user**: Keep away from heat and open flames. - No smoking.

**Environmental hazards**: See ECOLOGICAL INFORMATION, Section 12.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**: Not available.

### SECTION 15 - REGULATORY INFORMATION

**US Federal Information:**
Components listed below are present on the following U.S. Federal chemical lists:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>TSCA Inventory</th>
<th>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</th>
<th>SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355.</th>
<th>SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical</th>
<th>Toxic Chemical</th>
<th>de minimus Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexylene glycol</td>
<td>107-41-5</td>
<td>Yes</td>
<td>None.</td>
<td>None.</td>
<td>No</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Acute Health Hazard
SAFETY DATA SHEET

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>California Proposition 65</th>
<th>State “Right to Know” Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Listed</td>
<td>Type of Toxicity</td>
</tr>
<tr>
<td>Hexylene glycol</td>
<td>107-41-5</td>
<td>No</td>
<td>N/Ap</td>
</tr>
</tbody>
</table>

Canadian Information:

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.
Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

International Information:

Components listed below are present on the following international Inventory list:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>European EINECs</th>
<th>Australia AICS</th>
<th>Philippines PICCS</th>
<th>Japan ENCS</th>
<th>Korea KECI KECL</th>
<th>China IECSC</th>
<th>New Zealand IOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexylene glycol</td>
<td>107-41-5</td>
<td>203-489-0</td>
<td>Present</td>
<td>Present</td>
<td>(2)-240</td>
<td>KE-24702</td>
<td>Present (19504)</td>
<td>HSR003002</td>
</tr>
</tbody>
</table>

SECTION 16. OTHER INFORMATION

Legend:
- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- CSA: Canadian Standards Association
- DOT: Department of Transportation
- EPA: Environmental Protection Agency
- HMIS: Hazardous Materials Identification System
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- LC: Lethal Concentration
- LD: Lethal Dose
- MN: Minnesota
- N/A: Not Applicable
- N/Av: Not Available
- NFPA: National Fire Protection Association
- NIOSH: National Institute of Occupational Safety and Health
- NJ: New Jersey
- NTP: National Toxicology Program
- OECD: Organisation for Economic Co-operation and Development
- OSHA: Occupational Safety and Health Administration
- PA: Pennsylvania
- PEL: Permissible exposure limit
- RCRA: Resource Conservation and Recovery Act
- RI: Rhode Island
- RTECS: Registry of Toxic Effects of Chemical Substances
- SARA: Superfund Amendments and Reauthorization Act
SAFETY DATA SHEET

STEL: Short Term Exposure Limit  
TLV: Threshold Limit Values  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Identification System

References:
- Material Safety Data Sheet from manufacturer
- Canadian Centre for Occupational Health and Safety, CCInfoWeb Databases, 2015
  (Chempendium, RTECs, HSDB, INCHEM).

Preparation Date (mm/dd/yyyy): 11/24/2015

Other special considerations for handling:
- Provide adequate information, instruction and training for operators.

Prepared for:
Comet Chemical Company Ltd.
3463 Thomas Street
Innisfill, ON L9S 3W4
Information (M-F 8:00-5:00): 705-436-5580
www.cometchemical.com

Prepared by:
ICC The Compliance Center Inc.
Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada)
http://www.thecompliancecenter.com

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END OF DOCUMENT