SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: Monochlorobenzene

Product Code(s)

: None assigned.

Recommended use of the chemical and restrictions on use

: Industrial solvent.
  Use pattern: Professional use only
  Recommended restrictions None known.

Chemical family

: Aromatic organic compounds

Name, address, and telephone number of the supplier:

Comet Chemical Company Ltd.
3463 Thomas Street
Innisfill, ON, Canada
L9S 3W4
Supplier's Telephone #

: 705-436-5580

24 Hr. Emergency Tel #

: TERRRAPURE ENVIRONMENTAL : 800-567-7455

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Clear, colorless liquid. Hydrocarbon odour.

Most important hazards: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:

Flammable Liquid - Category 3
Acute toxicity, oral - Category 4
Skin Irritation - Category 2
Serious eye damage/eye irritation - Category 2A
Specific Target Organ Toxicity, Single Exposure - Category 3 narcotic effects
Specific target organ toxicity, single exposure - Category 3 respiratory tract irritation
Specific target organ toxicity, repeated exposure - Category 2
Aspiration Toxicity - Category 1

Label elements

Hazard pictogram(s)

DANGER!
SAFETY DATA SHEET

Hazard statement(s)

Flammable liquid and vapor.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

Precautionary statement(s)

Keep away from heat, open flames and hot surfaces. - No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical and ventilating equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist or vapor.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
Rinse mouth.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
If skin irritation occurs, get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
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.
In case of fire: Use water fog, dry chemical, CO2 or 'alcohol' foam to extinguish.

Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Keep cool.

Dispose of contents/container in accordance with local regulation.

Other hazards

Other hazards which do not result in classification: Burning produces obnoxious and toxic fumes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Environmental precautions: Do not allow this material to drain into sewers/water supplies. See ECOLOGICAL INFORMATION, Section 12.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS #</th>
<th>Concentration (% by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monochlorobenzene</td>
<td>Chlorobenzene</td>
<td>108-90-7</td>
<td>100.00</td>
</tr>
</tbody>
</table>
## SAFETY DATA SHEET

### SECTION 4. FIRST-AID MEASURES

**Description of first aid measures**

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
<td>If inhaled: Remove person to fresh air and keep comfortable for breathing. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Call a POISON CENTRE or doctor/physician if you feel unwell.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>Immediately flush with plenty of water, while removing contaminated clothing. If irritation persists, seek prompt medical attention. Wash contaminated clothing before reuse.</td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
<td>For eye contact, flush with running water for at least 15 minutes. If eye irritation persists: get medical advice/attention.</td>
</tr>
</tbody>
</table>

**Most important symptoms and effects, both acute and delayed**

- Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause respiratory irritation. May cause coughing and breathing difficulties. Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Could cause cyanosis (bluish discoloration of the skin due to deficient oxygenation of the blood). Aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal. May cause headache, nausea, dizziness and other symptoms of central nervous system depression. May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause damage to the blood system, the liver and the kidneys through prolonged or repeated exposure.

**Indication of any immediate medical attention and special treatment needed**

- Treat symptomatically. Aspiration hazard. This product is a CNS depressant.

### SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

- **Suitable extinguishing media**
  - Carbon dioxide (CO2);
  - Dry chemical;
  - Alcohol resistant foam;
  - Water fog

- **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**

- Flammable liquid and vapour. Vapours may ignite explosively. Vapours are heavier than air and may spread along floors. May be sensitive to static discharge.

**Flammability classification (OSHA 29 CFR 1910.106)**

- Flammable Liquids - Category 3

**Hazardous combustion products**

- Carbon oxides; Hydrogen chloride; Phosgene; and other irritating fumes and smoke

**Special protective equipment and precautions for firefighters**

- **Protective equipment for fire-fighters**
  - Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

- **Special fire-fighting procedures**
  - Do not breathe fumes or vapours. Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.
SAFETY DATA SHEET

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

Environmental precautions

- Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.

Methods and material for containment and cleaning up

- Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. 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). Contact the proper local authorities. Refer to Section 13 for disposal of contaminated material.

Special spill response procedures

- Contact appropriate local and provincial environmental authorities for assistance and/or reporting requirements. EPA/CERCLA Reportable quantity (RQ): chlorobenzene (100 lbs / 45.4 kg)

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

- Wear protective gloves/clothing and eye/face protection. Use only in well-ventilated areas. Avoid breathing vapour or mist. Do not breathe mist or vapor. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Keep away from flames and hot surfaces. No smoking. Use only non-sparking tools. Take precautionary measures against static discharges. Ground all equipment during handling. Use explosion-proof electrical and ventilating equipment.

Conditions for safe storage

- Keep container tightly closed. Store in cool/well-ventilated place. Store locked up. 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. Empty containers may contain hazardous residues.

Incompatible materials

- Strong oxidizing agents; Alkali metals; Acetic acid; Sodium; Reducing agents.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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>Monochlorobenzene</td>
<td>10 ppm</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Exposure controls

Ventilation and engineering measures
SAFETY DATA SHEET

Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof equipment. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection: If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. 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. Advice should be sought from respiratory protection specialists.

Skin protection: Wear protective gloves/clothing. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye / face protection: Wear eye/face protection. Safety glasses with side-shields or chemical splash goggles.

Other protective equipment: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations:

Do not breathe mist or vapor. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Do not take contaminated clothing home. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear colourless liquid.
Odour: Hydrocarbon odour.
Odour threshold: 1 ppm
pH: No information available.
Melting/Freezing point: -45°C
Initial boiling point and boiling range: 132°C
Flash point: 28°C
Flashpoint (Method): Cleveland closed cup
Evaporation rate (BuAe = 1): Not available.
Flammability (solid, gas): Not applicable.
Lower flammable limit (% by vol.): 1.3%
Upper flammable limit (% by vol.): 7%
Oxidizing properties: None known.
Explosive properties: May be sensitive to static discharge.
Vapour pressure: 9 mm Hg
Vapour density: 3.9
Relative density / Specific gravity: 1.05
Solubility in water: Slightly soluble. (50 mg/L)
Other solubility(ies): Soluble in most organic solvents.
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution: 2.84
Auto-ignition temperature: 600°C
Decomposition temperature: No information available.
Viscosity: 0.729 mm²/s
Volatile (% by weight): No information available.
SAFETY DATA SHEET

Monochlorobenzene
SDS Preparation Date (mm/dd/yyyy): 04/20/2017

Volatile organic Compounds (VOC's)
: No information available.

Absolute pressure of container
: Not applicable.

Flame projection length
: Not applicable.

Other physical/chemical comments
: Molecular Weight: 112.56 g/mol
Molecular formula: C₆-H₅-Cl

SECTION 10. STABILITY AND REACTIVITY

Reactivity
: Not normally reactive.

Chemical stability
: Stable under normal conditions. Chlorobenzene decomposes slowly under excessive heating at high temperatures to give some hydrogen chloride gas and traces of phosgene.

Possibility of hazardous reactions
: Hazardous polymerization does not occur.

Conditions to avoid
: Open flames, sparks, high heat, direct sunlight, and close proximity to incompatible substances. Do not use in areas without adequate ventilation. Direct sunlight.

Incompatible materials
: See Section 7 (Handling and Storage) for further details.

Hazardous decomposition products
: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

<table>
<thead>
<tr>
<th>Routes of entry</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td></td>
</tr>
<tr>
<td>Skin &amp; eye</td>
<td></td>
</tr>
<tr>
<td>Ingestion</td>
<td></td>
</tr>
</tbody>
</table>

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation
: May cause respiratory tract irritation. Coughing, difficulty breathing, and tightness in chest. May cause headache, nausea, dizziness and other symptoms of central nervous system depression.

Sign and symptoms ingestion
: Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal. Could result in poisoning, with symptoms of cyanosis, shortness of breath, nausea, dizziness, vomiting, collapse, coma, convulsions and death.

Sign and symptoms skin
: Causes skin irritation. Symptoms may include a burning sensation, redness, swelling, drying, and cracking of the skin.

Sign and symptoms eyes
: Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision.

Potential Chronic Health Effects
: May cause damage to the blood system, the liver and the kidneys through prolonged or repeated exposure.
SAFETY DATA SHEET

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 classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:
Specific Target Organ Toxicity, Single Exposure - Category 1
Causes damage to organs. (Peripheral nervous system)
Specific target organ toxicity, single exposure - Category 3.
May cause drowsiness or dizziness.
Medical conditions aggravated by overexposure : Pre-existing skin, eye, respiratory and central nervous system disorders.
Synergistic materials : No information available.
Toxicological data : See below for toxicological data on the substance.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LC50(4hr) inh, rat</th>
<th>LD50 (Oral, rat)</th>
<th>LD50 (Rabbit, dermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monochlorobenzene</td>
<td>29.7 mg/L</td>
<td>1427-3400 mg/kg</td>
<td>&gt;2212 mg/kg</td>
</tr>
</tbody>
</table>

Other important toxicological hazards : None reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : Harmful to aquatic life. Do not allow material to contaminate ground water system. See the following tables for the substance's 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>LC50 / 96h</td>
</tr>
<tr>
<td>Monochlorobenzene</td>
<td>108-90-7</td>
<td>4.5mg/L (Lepomis macrochirus)</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>EC50 / 48h</td>
</tr>
<tr>
<td>Monochlorobenzene</td>
<td>108-90-7</td>
<td>26 mg/L (Daphnia magna)</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>EC50 / 96h or 72h</td>
</tr>
<tr>
<td>Monochlorobenzene</td>
<td>108-90-7</td>
<td>11.4mg/L (Green algae)</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

Persistence and degradability

: Not readily biodegradable.

Bioaccumulation potential

: No information available.

<table>
<thead>
<tr>
<th>Components</th>
<th>Partition coefficient n-octanol/water (log Kow)</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monochlorobenzene (CAS 108-90-7)</td>
<td>2.84</td>
<td>39-40</td>
</tr>
</tbody>
</table>

Mobility in soil

: The product itself has not been tested.

Other Adverse Environmental effects

: None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal

: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.

Methods of Disposal

: Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.
### SAFETY DATA SHEET

#### 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>TDG</td>
<td>UN1134</td>
<td>CHLOROBENZENE</td>
<td>3</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td><strong>TDG Additional information</strong></td>
<td></td>
<td></td>
<td>May be shipped as a Limited Quantity when transported in containers no larger than 5 L (1.3 gallons); in packages not exceeding 30 kg (66 pounds) gross mass.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49CFR/DOT</td>
<td>UN1134</td>
<td>CHLOROBENZENE</td>
<td>3</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td><strong>49CFR/DOT Additional information</strong></td>
<td></td>
<td></td>
<td>May be shipped as a Limited Quantity when transported in containers no larger than 5 L (1.3 gallons); in packages not exceeding 30 kg (66 pounds) gross mass.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>UN1134</td>
<td>Chlorobenzene</td>
<td>3</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td><strong>ICAO/IATA Additional information</strong></td>
<td></td>
<td></td>
<td>Refer to ICAO/IATA Packing Instruction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>UN1134</td>
<td>CHLOROBENZENE</td>
<td>3</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td><strong>IMDG Additional information</strong></td>
<td></td>
<td></td>
<td>Consult the IMDG regulations for exceptions.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Special precautions for user**
- Appropriate advice on safety must accompany the package.

**Environmental hazards**
- This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
- This information is 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></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monochlorobenzene</td>
<td>106-90-7</td>
<td>Yes</td>
<td>100 lb/ 45.4 kg</td>
<td>N/Av</td>
<td>Yes</td>
<td>1%</td>
</tr>
</tbody>
</table>

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Flammable; Skin irritation; Eye irritation; Acute toxicity; Specific target organ toxicity, single exposure; Specific target organ toxicity, repeated exposure; Aspiration hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.
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>Monochlorobenzene</td>
<td>108-90-7</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. All ingredients are present on the 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 KECl/KECL</th>
<th>China IECSC</th>
<th>New Zealand IOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monochlorobenzene</td>
<td>108-90-7</td>
<td>203-628-5</td>
<td>Present</td>
<td>Present</td>
<td>(3)-31</td>
<td>KE-25489</td>
<td>Present</td>
<td>HSR001108</td>
</tr>
</tbody>
</table>

SECTION 16. OTHER INFORMATION

Legend:
ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
ATE: Acute Toxicity Estimate
CA: California
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
ECHA: European Chemicals Agency
ECOTOX: U.S. EPA Ecotoxicology Database
EINECS: European Inventory of Existing Commercial chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IBC: Intermediate Bulk Container
IECSC: Inventory of Existing Chemical Substances
IMDG: International Maritime Dangerous Goods
IOC: Inventory of Chemicals
IUCLID: International Uniform Chemical Information Database
KECI: Korean Existing Chemicals Inventory
KECL: Korean Existing Chemicals List
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MN: Minnesota
N/Ap: Not Applicable
N/Av: Not Available
SAFETY DATA SHEET

NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
PICCS: Philippine Inventory of Chemicals and Chemical Substances
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet / Material Safety Data Sheet
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

References:
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2016
2. International Agency for Research on Cancer Monographs, searched 2017
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2017(Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.

Preparation Date (mm/dd/yyyy):
04/20/2017

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

Prepared for:
Comet Chemical Company Ltd.
3463 Thomas Street
Innisfil, 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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SAFETY DATA SHEET

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