1. **Product identification**

   **Product Name**: CL TEP 090 Solvent

   **Emergency telephone**: INFOTRAC 24-hour telephone # 1-800-535-5053

2. **Hazard Identification**

   **Danger**: highly flammable
   **State of matter**: liquid clear
   **Odor**: alcoholic

   **Environmental precautions**: Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

   **Potential health effects**

   **Acute effects**
   - **Eyes**: Causes eye irritation
   - **Skin**: Prolonged or repeated skin contact with liquid may cause defatting resulting in drying redness and possible blistering.
   - **Inhalation**: May cause respiratory tract irritation.
   - **Ingestion**: Aspiration hazard if swallowed – can enter lungs and cause damages.

3. **Composition/Information on Ingredients**

   **Components**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol</td>
<td>64-17-5</td>
<td>85%</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>9%</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>4%</td>
</tr>
<tr>
<td>Isobutyl methyl ketone</td>
<td>108-10-1</td>
<td>1%</td>
</tr>
</tbody>
</table>

4. **First Aid Measures**

   **Eye Contact**: Immediately flush eyes with plenty of flowing water for 15 minutes holding eyelids apart. Consult physician.

   **Skin Contact**: Wash off immediately with soap and plenty of water while removing all contaminated clothing. Wash before reuse. If skin irritation persists, call a physician.

   **Inhalation**: Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

   **Ingestion**: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

5. **Fire Fighting Measures**

   **Flammability**
   - **Flash point**: 13º C
   - **Autoignition temperature**: ~400 º C
   - **Explosion limits**
     - Lower: 4% (v)
     - Upper: 20% (v)
   - **Fire/explosion**: Flash back possible over considerable distance
   - **Hazardous combustion products**: Carbon oxides
   - **Suitable extinguishing media**: Water spray, alcohol resistant foam, dry chemical, carbon dioxide
   - **Protective measures**: Wear self-contained breathing apparatus and protective suit.
   - **Further information**: Cool containers/tanks with water spray

6. **Accidental Release Measures**

   **Personal precautions**: Keep away from and upwind of spill/leak. Remove all sources of ignition. Do not breath vapors or spray mist. Material can create slippery conditions.

   **Environmental precautions**: Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

   **Methods for cleaning up**: Soak up with inert absorbent material and dispose of a hazardous waste.
7. Handling and Storage
   Safe handling advice: Provide fresh air. Wear personal protective equipment. Ensure all equipment is electrically grounded before beginning transfer operations.
   Advice on protections against fire and explosion: Use explosion-proof equipment.
   Storage: Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure Controls/Personal Protections
   Engineering measures: Provide sufficient air exchange and/or exhaust in work rooms.
   Personal protective equipment:
   Eyes: Safety glasses with side shields
   Skin: Protective suit; safety shoes
   Inhalation: In case of insufficient ventilation, wear suitable respiratory equipment
   Hygiene measures: Wash hands before breaks and immediately after handling product
   Protective measures: Wear suitable protective equipment

Exposure Guidelines
Components Exposure limit(s)

Ethanol
   US. ACGIH Threshold Limit Values time weighted average 1,000 ppm
   US. NIOSH: Pocket Guide to Chemical Hazards Recommended exposure limit (REL): 1,000 ppm (1,900 mg/m3)
   US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 1,000 ppm (1,900 mg/m3)
   US. OSHA Table Z-1-A (29 CFR 1910.1000) time weighted average 1,000 ppm (1,900 mg/m3)
   US. OSHA Table Z-1-A (29 CFR 1910.1000) Short term exposure limit 300 ppm (885 mg/m3)

Isopropyl Alcohol
   US. ACGIH Threshold Limit Values time weighted average 200 ppm
   US. NIOSH: Pocket Guide to Chemical Hazards Recommended exposure limit (REL): 400 ppm (980 mg/m3)
   US. NIOSH: Pocket Guide to Chemical Hazards Short term exposure limit (REL): 500 ppm (1,225 mg/m3)
   US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 400 ppm (980 mg/m3)
   US. OSHA Table Z-1-A (29 CFR 1910.1000) time weighted average 400 ppm (980 mg/m3)
   US. OSHA Table Z-1-A (29 CFR 1910.1000) Short term exposure limit 500 ppm (1,225 mg/m3)

Methyl Alcohol
   US. ACGIH Threshold Limit Values time weighted average 200 ppm
   US. ACGIH Threshold Limit Values Short term time exposure limit 250 ppm
   US. NIOSH: Pocket Guide to Chemical Hazards Recommended exposure limit (REL): 200 ppm (260 mg/m3)
   US. NIOSH: Pocket Guide to Chemical Hazards Short term exposure limit (REL): 250 ppm (325 mg/m3)

Methanol
   US. ACGIH Threshold Limit Values time weighted average 200 ppm
   US. ACGIH Threshold Limit Values Short term time exposure limit 250 ppm

Methyl Isobutyl Ketone
   US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 100 ppm (410 mg/m3)
   US. OSHA Table Z-1-A (29 CFR 1910.1000) time weighted average 50 ppm
   US. OSHA Table Z-1-A (29 CFR 1910.1000) Short term exposure limit 750 ppm

PEL= Permissible Exposure Limits
TW= Time Weighted Average (8 hr.)
TLV= Threshold Limit Value
STEL= Short Term Exposure Limit (15 min.)
EL= Excursion Limit
WEEL= Workplace Environmental Exposure Level
SECTION 9 Physical and chemical properties

Color: clear
Odor: alcoholic
Form: liquid
Boiling point/boiling range: 74-80 °C
Flash point: 13 °C
Lower explosion limit: 4 %(V)
Upper explosion limit: 20 %(V)
Vapor pressure: ca. 66.661 hPa at 25 °C
Solubility: miscible
Melting point/range: -114 °C
Density: 0.79 g/cm³

SECTION 10 STABILITY AND REACTIVITY

Conditions to avoid: Heat, flames and sparks
Hazardous decomposition products: Carbon oxides
Incompatible products: Strong oxidizing agents. Incompatible with acids. Halogenated compounds
Hazardous reactions: Hazardous polymerization does not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute oral toxicity
Ethanol: LD50 rat: 7,060 mg/kg; literature value
Methyl Isobutyl Ketone: LD50 rat: 2,080 mg/kg; literature value
Methanol: LD50 rat: 5,628 mg/kg

Acute inhalation toxicity
Ethanol: LC50 rabbit: 66,000 mg/l; literature; 4 h
Isopropyl alcohol: LC50 rabbit: 16,000 mg/l; literature; 8 h
Methanol: LC50 rat: 100 g/m³; literature

Acute dermal toxicity
Ethanol: LDLo rabbit: 20,000 mg/kg literature value
Methyl Isobutyl Ketone: LDLo rabbit: 1,600 mg/kg literature value
Methanol: LDLo rabbit: 15,800 mg/kg literature value

Skin irritation
Isopropyl alcohol: rabbit: mild skin irritation; literature value
Methyl Isobutyl Ketone: rabbit: mild skin irritation; literature value

Eye irritation
Isopropyl alcohol: rabbit: moderate eye irritation; literature value
Methyl Isobutyl Ketone: rabbit: moderate eye irritation; literature value

SECTION 12 DISPOSAL CONSIDERATIONS


Waste from residues / unused products: In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil.

Uncleaned empty packaging: Do not burn, or use a cutting torch on, the empty drum. Triple rinse containers. Can be offered for recycling, re-conditioning or puncture.

SECTION 13 TRANSPORT INFORMATION

ADR: UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II
RID: UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II
ADNR: UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II
IMDG: UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II, EmS F-E, S-D
ICAO/IATA: UN 1987 Alcohols, N.O.S. (ethanol, iso-propanol), 3, II

SECTION 14 REGULATORY INFORMATION

U.S. Federal Classifications:
OSHA Hazards: Flammable Liquid, Mild eye irritant, Mild respiratory irritant
SARA 311/312: Fire Hazard, Acute Health Hazard
U.S. Regulated Ingredients:
Hazard information reporting
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313
Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Components

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
</tr>
<tr>
<td>4-methylpentan-2-one; isolbutyl methyl ketone</td>
<td>108-10-1</td>
</tr>
</tbody>
</table>

Inventories

EU list of existing chemical substances: All chemical constituents are listed in: EU list of existing chemical substances
US TSCA Inventory: All chemical constituents are listed in: US TSCA Inventory
Australian Inv. of Chem. Substances AICS: All chemical constituents are listed in: Australian Inv. of Chem. Substances AICS
Canadian Domestic Substances List DSL: All chemical constituents are listed in: Canadian Domestic Substances List DSL
Jap. Inv. of Exist. & New Chemicals ENCS: All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals ENCS
Korean Exist. Chemicals List ECL: All chemical constituents are listed in: Korean Exist. Chemicals List ECL
Philippines Inv. of Chem. Subst. PICCS: All chemical constituents are listed in: Philippines Inv. of Chem. Subst. PICCS
Inv. of Exist. Chem. Substances in China: All chemical constituents are listed in: Inv. of Exist. Chem. Substances in China

Other international regulations

WHMIS Classification

| B2: Flammable Liquid | D2B: Toxic Material Causing Other Toxic Effects |

SECTION 16 OTHER INFORMATION

Hazard Ratings

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Hazard</th>
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<td>NFPA</td>
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