MATERIAL SAFETY DATA SHEET
METHYL CELLOSOLVE

1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Methyl Cellosolve
Synonyms: Ethylene glycol monomethyl ether, 2-Methoxyethanol
Company Identification: Sisco Research Laboratories Pvt. Ltd.
Andheri (East), Mumbai – 400 099.
Tel : +91 22 2687 2601
Fax : +91 22 2687 8241
Website : www.srlchem.com

2 - COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
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</thead>
<tbody>
<tr>
<td>109-86-4</td>
<td>Methyl Cellosolve</td>
<td>99%</td>
<td>203-713-7</td>
</tr>
</tbody>
</table>

3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Flammable. Harmful by inhalation, in contact with skin and if swallowed. May impair fertility. May cause harm to the unborn child.

Potential Health Effects
Eye: Causes eye irritation. Causes redness and pain.
Skin: Harmful if absorbed through the skin. Causes redness and pain.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: Causes respiratory tract irritation.
Chronic: Prolonged or repeated exposure may cause adverse reproductive effects. May cause liver and kidney damage.

4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid immediately. Wash mouth out with water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
5 - FIRE FIGHTING MEASURES

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Flammable liquid and vapor. May form explosive peroxides.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. Water may be ineffective.

6 - ACCIDENTAL RELEASE MEASURES

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool.

7 – HANDLING AND STORAGE

**Handling:** Use spark-proof tools and explosion proof equipment. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area. Store under an inert atmosphere.

8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

**Engineering Controls:** Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

**Personal Protective Equipment**

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective gloves to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9 - PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Clear liquid

**Specific Gravity/Density:** 0.963-0.965 g

**Molecular Formula:** C₃H₈O₂

**Molecular Weight:** 76.10
10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, exposure to air.

Incompatibilities with Other Materials: Exposure to air, acids, bases, copper, copper alloys.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

11 - TOXICOLOGICAL INFORMATION

RTECS#: CAS# 109-86-4: KL5775000

LD50/LC50: RTECS: CAS# 109-86-4:
- Draize test, rabbit, eye: 97 mg;
- Draize test, rabbit, eye: 500 mg/24H Mild;
- Draize test, rabbit, skin: 483 mg/24H Mild;
- Inhalation, mouse: LC50 = 1480 ppm/7H;
- Inhalation, rat: LC50 = 1500 ppm/7H;
- Oral, mouse: LD50 = 2560 mg/kg;
- Oral, mouse: LD50 = 2800 mg/kg;
- Oral, rabbit: LD50 = 890 mg/kg;
- Oral, rabbit: LD50 = 890 mg/kg;
- Oral, rat: LD50 = 2370 mg/kg;
- Oral, rat: LD50 = 2460 mg/kg;
- Skin, rabbit: LD50 = 1280 mg/kg;
- Skin, rabbit: LD50 = 2000 mg/kg;

Other: Irritation: Eye, rabbit: 97 mg Eye, guinea pig: 10 µg mild

Carcinogenicity: 2-Methoxyethanol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

12 - ECOLOGICAL INFORMATION

Not available

13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

14 - TRANSPORT INFORMATION

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<tr>
<th>IATA</th>
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<tbody>
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<td>Ethylene Glycol</td>
<td>Ethylene Glycol</td>
</tr>
<tr>
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**15 - REGULATORY INFORMATION**

**European/International Regulations**
European Labeling in Accordance with EC Directives

**Hazard Symbols:**

| T |

**Risk Phrases:**
R 61 May cause harm to the unborn child.
R 10 Flammable.
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R 60 May impair fertility.

**Safety Phrases:**
S 53 Avoid exposure - obtain special instructions before use.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**WGK (Water Danger/Protection)**
CAS# 109-86-4: 1

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**16 - ADDITIONAL INFORMATION**

**SISCO RESEARCH LABORATORIES** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.