



SAFETY DATA SHEET

CELLOSOLVE SOLVENT

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: CELLOSOLVE SOLVENT

Recommended use: Chemical for industrial

Manufacturer/Supplier: **MODERN CHEMICAL CO.,LTD.**
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2. HAZARDS IDENTIFICATION

Label elements

Pictogram



Signal word

Danger

Hazard statement(s):

- 1.) Flammable liquid and vapour.
- 2.) Harmful if swallowed.
- 3.) Toxic if inhaled.
- 4.) May damage fertility or the unborn child.

Precautionary statement(s):

- 1.) Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- 2.) Avoid breathing mist/vapours/spray.
- 3.) Do not eat, drink or smoke when using this product.
- 4.) Wear protective gloves/protective clothing/eye protection/face protection.



- 5.) IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 6.) In case of fire: Use alcohol resistant foam or fine spray/water fog to extinguish.
- 7.) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if wearing and if easy to remove. Continue rinsing.
- 8.) IF ON SKIN, hair etc: Take off immediately all contaminated clothing. Remain under running water shower so that affected body parts are rinsed well.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: Cellosolve® ,Ethylene glycol monoethyl ether, Ethyl glycol, "oxitol", 2-ethoxy ethanol, 2-(ethoxy ethoxy)-ethanol.

Ingredients	% (w/w)	CAS NO.
CELLOSOLVE SOLVENT	100	110-80-5

4. FIRST AID MEASURES

- General advice:** Take off immediately all contaminated clothing & get under the running water shower if spilled over body.
- Inhalation:** Move to fresh air, seek medical attention in case of discomfort.
- Skin contact:** Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.
- Eye contact:** Flush eyes with water with eyelids held open and seek medical attention.
- Ingestion:** Do NOT induce vomiting, rinse mouth with water and seek medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Dry chemical, foam, carbon dioxide, water fog or fine spray

Unsuitable Extinguishing Media:

None known

Specific hazards arising from Chemicals:

Avoid contamination with oxidizing agent i.e. nitrates, oxidizing acids, chlorine bleaches etc. as ignition may result.



Special protective equipment for fire-fighters:

Firefighters must wear positive-pressure, self-contained breathing apparatus(SCBA) and appropriate clothing.
Spray water on fire-exposed containers to reduce risk of their rupture.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Isolate the accidental-release area and ensure no unauthorized entry. Do not walk on the spilled area. Ensure adequate ventilation in the enclosed area. Eliminate all ignition sources around the affected area. Use adequate protective equipment, during all such measure meant to deal with accidental release.

Environmental precautions: Prevent spillage from entering into soil, sewers, drainage and groundwater.

Methods and Material for Containment and Clean Up:

For small amount: Collect the spillage through an appropriate absorbent material.
Dispose-off the collected spillage, in accordance with local regulations.
Clean the affected area with water.

For large amount: Pump-off the spillage and collect it in suitable containers.
Dispose-off the collected spillage, in accordance with local regulations.
Clean the affected area with water.

7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Keep containers tightly closed when not in use. Do not eat, drink, or smoke in working area. Take measures to prevent the build-up of electrostatic charge. Avoid contact with eyes and skin. Adopt good safety and industrial hygiene practices. Wash thoroughly after handling.

Conditions for Safe Storage & Unsuitable Materials:

Store material in a cool & dry place.

Incompatibilities: Oxidizing material, strong alkalis and acids, Peroxides, Anhydrides etc.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure limits: TWA 0.5 ppm



Appropriate Engineering Controls: Adequate ventilation systems as needed to control & maintain concentrations of Air-borne contaminants below applicable exposure limits must be put in place. Flame-proof devices, sensors& auto alarm systems to be installed.

Individual Protection Measures

Respiratory protection: Appropriate respiratory protection should be needed.

Hand protection: Chemically resistant protective gloves to be used.

Eye protection: Safety glasses with side shield, Face shield etc.to be used.

Skin and body protection: Wear suitable working clothing.

Hygiene measures: Wear protective clothing & equipment as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practices. Wash contaminated clothing immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, colourless, characteristic	Evaporation rate : 0.35 (BuOAc=1)
Melting Point : -90°C	Specific gravity : 0.929-0.934 g/cm ³ at 20 °C
pH : 5-8	Solubility in water : Soluble
Boiling point : 135°C	Viscosity : 2.1 mPa at 20°C
Vapour pressure : 3.8 mmHg at 20°C	Vapour density : 3.1 g/cm ³ (air=1)
Lower explosive limits: 1.7%Vol	Upper explosive limits: 15.6%Vol
Auto-ignition temperature: 235°C	Flash Point: 43°C
Odour threshold: N/A	Flammability (solid, gas): N/A
Decomposition temperature: N/A	Solubility in other solvents: N/A
n-octanol/water partition coefficient (log P_{ow}): -0.54	

10. STABILITY AND REACTIVITY

Chemical stability: Remains Stable under recommended Storage Conditions.

Reactions: Remains Stable under recommended Storage Conditions.

Possibility of Hazardous Reactions: Not known.

Conditions to avoid: Direct Sunlight, High Temperature. Open flame, Overheating, Heat. Sparks.



Materials to avoid: Oxidizing Materials, Strong Alkalis, Acids, Peroxides, Anhydrides
etc.

Hazardous decomposition products: Mainly CO & CO₂.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD50 (Oral, rat): >2.125 mg/kg
LD50 (Dermal, rabbit): 3.900 mg/kg
LC50 (Inhalation, rat): 2000 ppm-7h

Sensitization: Inhalation: Irritant effect, headache, vertigo, dizziness, breathing difficulties.
Skin: Slightly irritant. Eye: Causes slight to moderate irritation.
Ingestion: Gastrointestinal complaints, nausea, vomiting, diarrhea.

Chronic toxicity: Does not contain any component that is considered a human carcinogen.

Further toxicological information: No data available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish: LC50 - *Lepomis macrochirus*: > 10000 mg/l-96h

Toxicity to daphnia and other aquatic invertebrates:
EC50 - *Daphnia* (water flea): 1892.52 mg/l -48h

Toxicity to algae: No data available

Toxicity to bacteria: No data available

Biodegradability Remarks: Water/Soil: LOW (Half-life=56 days)

Bioaccumulative Potential: Low (LogKOW = -0.32).

Mobility: High (KOC=1).

Affected in any other way: No data available.

13. DISPOSAL CONSIDERATIONS

Material Disposal: Do not dump into any sewers, on the ground, or into any body of water. All disposal methods must be in compliance with Federal, state/Provincial, and local regulations.



Container Disposal: Dispose of content and/or container in accordance with local, regional, national, and/or international Regulations.

14. TRANSPORT INFORMATION

ADR/RID

UN-No: 1171 Class: 3 Packing group: III

Proper shipping name: Ethylene Glycol Monoethyl Ether

IMDG/AND

UN-No: 1171 Class: 3 Packing group: III

EMS-No: F-E, S-D

Proper shipping name: Ethylene Glycol Monoethyl Ether

IATA

UN-No: 1171 Class: 3 Packing group: III

Proper shipping name: Ethylene Glycol Monoethyl Ether

15. REGULATORY INFORMATION

International Inventories

United States: All components of this product are listed on the TSCA inventory.

Australia: All components of this product are listed on the AICS.

China: All components of this product are listed on the IECSC.

Japan: All components of this product listed on the ENCS.

16. OTHER INFORMATION

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