

# Safety Data Sheet

## 2-ETHOXYETHANOL

### CELLOSOLVE

#### Section 1 - Chemical Product and Company Identification

**SDS Name:** Cellosolve

**Catalog Numbers:** A-106-5

**Company Identification:** ROWLEY BIOCHEMICAL  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

#### Section 2 - Hazards Identification

### GHS Classifications Category

#### HEALTH HAZARDS

H303-Acute Oral Toxicity: 5

H313-Acute Dermal Toxicity: 5

H332-Acute Inhalation toxicity: 4

H315-Skin Corrosion/Skin Irritation: 2

H319-Eye Damage/Irritation: 2A

H373-Specific Target Organ Toxicity RE: 2

### PHYSICAL HAZARDS Category

H225-Flammable Liquids: 2

### ENVIRONMENTAL HAZARD

H402-Chronic environmental Hazards: 2

## Pictogram or Hazard Symbols



Danger: Highly flammable liquid and vapour.



Warning: Harmful if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.



Warning: May cause damage to organs. (RE)  
(Kidneys, blood, liver, nervous system and mucous membranes.)

### Precautionary Statement.

#### H225

**P210** Keep away from heat, flames, and hot surfaces. No smoking.

**P233** Keep container tightly closed.

**P241** Use explosive-proof equipment.

**P242** Use only non-sparking tools.

**P243** Take precautionary measures against static discharge.

**P280** Wear protective gloves, clothing, and eye and face protection.

**P303 + P361 + P353** If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water.

**P370 + P378** In case of fire use ..... to extinguish.

**P403 + P235** Store in a well-ventilated place. Keep cool.

**P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

#### H303

**P312** Call a physician if you feel unwell.

#### H313

**P312** Call a physician if you feel unwell.

#### H332

**P261** Avoid breathing fumes/mist/vapors.

**P304 + P340** If inhaled, remove person to fresh air and keep comfortable for breathing.

1 Use only outdoors or in a well-ventilated area.

**P312** Call a physician if you feel unwell.

H315

**P280** Wear protective gloves, clothing, and eye and face protection.

**P302 + P352** If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.

**P332 + P313** If skin irritation occurs, get medical advice/attention.

**P362** Take off contaminated clothing and wash before reuse.

H319

**P305 + P351 + P338** If in eyes, rinse cautiously with water for several minutes.

**P337 + P313** If eye irritation persists, get medical advice/attention.

**P285** In case of inadequate ventilation, wear respiratory protection.

**P304+P341** IF INHALED: if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

**P342+P311** if experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

H373

**P260** Do not breathe fume/gas/mist/vapors.

**P314** Get medical advice/attention if you feel unwell.

**P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

| CAS#     | Chemical Name   | Percent |
|----------|-----------------|---------|
| 110-80-5 | 2-Ethoxyethanol | 100v/v  |

Section 4 - First Aid Measures

**Eye Exposure:** Corrosive to naked eye; in case of contact flush eyes well for 15 minutes, lifting the lower and upper eyelids occasionally. May cause permanent eye damage or blindness. Seek medical attention.

**Dermal Exposure:** Obtain medical attention: Corrosive to exposed skin. Flush skin well with water for 15 minutes, wash with soap and water. Remove affected clothing, get medical attention. May cause deep, penetrating burns.

**Oral Exposure:** Will cause severe burns to the mouth and severe and permanent damage to the digestive tract. Causes gastrointestinal burns and perforation of the digestive tract. Get Medical Attention immediately. Do not induce vomiting; give large quantities of water.

**Inhalation Exposure:** If inhaled, remove to fresh air. If not breathing give artificial respiration. Seek medical attention. Inhalation of vapors may cause coughing choking, inflammation of the nose, throat, and upper respiratory tract. In severe cases, may pulmonary edema, circulatory failure, and death.

## Section 5 - Fire Fighting Measures

**General Information:** Containers can build up pressure if exposed to heat and/or fire. 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. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

**Flash Point:** CLOSED CUP: 43<sup>o</sup> C ( 109<sup>o</sup> F ) OPEN CUP: 48.9<sup>o</sup>C (120<sup>o</sup>F)

**Flammable Limits:** LOWER: 1.8% UPPER: 16%

**Auto ignition Temperature:** 235 deg C (455 deg F)

**NFPA Rating:** (estimated) Health: 2; Flammability: 2; Instability: 0

**Methods for Cleaning up:** Ventilate area of leak or spill. Stop leak if possible to do so without risk. Clean-up personnel should wear protective clothing and NIOSH approved respirator. Dike and cover the contaminated areas with absorbent, non-combustible material such as earth, sand, or vermiculite. Neutralize with alkaline material such as soda ash or lime. Do not use combustibles. Do not flush to sewer.

## Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped at room temperature. Keep away from incompatible materials. Protect from heat. Vapors heavier than air, may travel considerable distance and ignite or explode.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

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

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

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Clear

**Odor:** Fruity. Pleasant

**Odor Threshold:** 0.5 ppm

**Molecular Weight:** 90.12 g/mole

**Taste:** Bitter

**pH:** N/A

**Vapor Pressure:** 0.5 kPa (@ 20 deg. C)

**Vapor Density:** 3.11

**Evaporation Rate:** N/A

**Specific Gravity:** 0.931

**Viscosity:** N/A

**Boiling Point:** 135.1 deg. C (275.2 F)

**Freezing/Melting Point:** N/A

**Solubility:** Easily soluble in oil.

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Conditions to avoid:** Excess heat, sunlight, confined spaces.

**Incompatibilities with other materials:** Reactive with oxidizing agents

## Section 11 - Toxicological Information

**Acute:**

Inhalation rat LC50: 2000 mg/m<sup>3</sup> 4 hours Mouse.

Oral Rat LD50: 2125 mg/kg.

Investigated as a tumorigen, mutagen, and reproductive effector.

**Carcinogenicity:** NTP: No **IARC:** No **Z List:** No **OSHA reg.** No

**Special Remarks on other Toxic Effects on Humans:** Material is irritating to mucous membranes and upper respiratory tract.

## Section 12 - Ecological Information

**Not available**

Section 13 - Disposal Considerations

**Appropriate method of disposal of substance or preparation:**

Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved waste facility.

Section 14 – Transport Information

|                       | US DOT                          | Canada TDG                      |
|-----------------------|---------------------------------|---------------------------------|
| <b>Shipping Name:</b> | Ethylene Glycol Monoethyl Ether | Ethylene Glycol Monoethyl Ether |
| <b>Hazard Class:</b>  | 3                               | 3                               |
| <b>UN Number:</b>     | UN1171                          | UN1171                          |
| <b>Packing Group:</b> | III                             | III                             |

Section 15 - Regulatory Information

**Symbol: F Flammable. WHMIS (Canada): Class B-3 Combustible liquid with a flash point between 37.8 °C (100F)**

**Risk and Safety phrases**

**Risk Phrases:**

- R11 Highly flammable.
- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed
- R36/38 Irritating to eyes and skin
- R51 Toxic to aquatic organisms
- R61 May cause harm to the unborn child

**Safety Phrases:**

- S20/21 When using do not eat, drink or smoke
- S2 Keep out of the reach of children
- S 16 Keep away from sources of ignition - No smoking.
- S 33 Take precautionary measures against static discharges.
- S 7 Keep container tightly closed.
- S 9 Keep container in a well-ventilated place

Section 16 - Additional Information

**MSDS Creation Date:** May 11, 2012

**Revision #** 12/3/14 RC

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