

# Material Safety Data Sheet

| HAZARD WARNINGS | RISK PHRASES  | PROTECTIVE CLOTHING   |
|-----------------|---|---|
|                 | <b>Combustible material; avoid heat and sources of ignition.</b><br>The health risks of this compound have not been fully determined.<br>Exposure may cause irritation of the skin, eyes, and respiratory system. |     |

## Section I. Chemical Product and Company Identification

|                  |   |                                 |   |
|------------------|---|---------------------------------|---|
| Chemical Name    | <b>Ethylene Glycol Monoallyl Ether</b>                                |                                 |   |
| Catalog Number   | E0326   | Supplier                        | TCI America<br>9211 N. Harbortgate St.<br>Portland OR<br>1-800-423-8616                   |
| Synonym          | Allyl Glycol  |                                 |   |
| Chemical Formula | HOCH <sub>2</sub> CH <sub>2</sub> OCH <sub>2</sub> CH:CH <sub>2</sub> |                                 |   |
| CAS Number       | 111-45-5  | In case of<br>Emergency<br>Call | <b>Chemtrec®</b><br><b>(800) 424-9300 (U.S.)</b><br><b>(703) 527-3887 (International)</b> |

## Section II. Composition and Information on Ingredients

| Chemical Name                   | CAS Number | Percent (%)       | TLV/PEL        | Toxicology Data  |
|---------------------------------|------------|-------------------|----------------|--|
| Ethylene Glycol Monoallyl Ether | 111-45-5   | Min. 98.0<br>(GC) | Not available. | Rat LD <sub>50</sub> (oral) 3050 mg/kg<br>Mouse LD <sub>50</sub> (intraperitoneal) 250 mg/kg<br>Mouse LDLo (parenteral) 2000 mg/kg |

## Section III. Hazards Identification

|                        |   |
|------------------------|---|
| Acute Health Effects   | No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. |
| Chronic Health Effects | <b>CARCINOGENIC EFFECTS</b> : Not available.<br><b>MUTAGENIC EFFECTS</b> : Not available.<br><b>TERATOGENIC EFFECTS</b> : Not available.<br><b>DEVELOPMENTAL TOXICITY</b> Not available.<br>There is no known effect from chronic exposure to this product. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.                    |

## Section IV. First Aid Measures

|              |   |
|--------------|---|
| Eye Contact  | Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used. DO NOT use an eye ointment. Flush eyes with running water for a minimum of 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention. Treat symptomatically and supportively.  |
| Skin Contact | If the chemical gets spilled on a clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. Seek medical attention. Treat symptomatically and supportively. Wash any contaminated clothing before reusing. |
| Inhalation   | Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform artificial respiration. Seek medical attention. Treat symptomatically and supportively.   |
| Ingestion    | INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt, or waistband. If the victim is not breathing, administer artificial respiration. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Seek immediate medical attention and, if possible, show the chemical label. Treat symptomatically and supportively.   |

## Section V. Fire and Explosion Data

|                     |   |                  |                |
|---------------------|---|------------------|----------------|
| Flammability        | Combustible.  | Auto-Ignition    | Not available. |
| Flash Points        | 60°C (140°F)  | Flammable Limits | Not available. |
| Combustion Products | These products are toxic carbon oxides (CO, CO <sub>2</sub> ).  |                  |                |
| Fire Hazards        | Reactive with strong oxidizers. Vapors may travel to source of ignition and flash back. Closed containers may explode from the heat of a fire. Highly flammable in presence of open flames and sparks, of heat. |                  |                |

Continued on Next Page

Emergency phone number (800) 424-9300

Explosion Hazards Risks of explosion of the product in presence of mechanical impact: Not available.  
Risks of explosion of the product in presence of static discharge: Not available.  
No additional information is available regarding the risks of explosion.

Fire Fighting Media and Instructions SMALL FIRE: Use DRY chemicals, CO<sub>2</sub>, water spray or foam.  
LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.

### Section VI. Accidental Release Measures

Spill Cleanup Instructions Combustible material.  
Keep away from heat and sources of ignition. Mechanical exhaust required. Stop leak if without risk. Consult federal, state, and/or local authorities for assistance on disposal.

### Section VII. Handling and Storage

Handling and Storage Information COMBUSTIBLE. Store away from heat and sources of ignition. Mechanical exhaust required. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe gas, fumes, vapor or spray. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.  
Always store away from incompatible compounds such as oxidizing agents.

### Section VIII. Exposure Controls/Personal Protection

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash station and safety shower is proximal to the work-station location.

Personal Protection Splash goggles. Lab coat. Vapor respirator. Boots. Gloves. A MSHA/NIOSH approved respirator should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.



Exposure Limits Not available.

### Section IX. Physical and Chemical Properties

|                       |                |                       |                                   |
|-----------------------|----------------|-----------------------|-----------------------------------|
| Physical state @ 20°C | Liquid.        | Solubility            | Soluble in cold water, hot water. |
| Specific Gravity      | 0.96           |                       |                                   |
| Molecular Weight      | 102.13         | Partition Coefficient | Not available.                    |
| Boiling Point         | Not available. | Vapor Pressure        | Not available.                    |
| Melting Point         | Not available. | Vapor Density         | Not available.                    |
| Refractive Index      | Not available. | Volatility            | Not available.                    |
| Critical Temperature  | Not available. | Odor                  | Not available.                    |
| Viscosity             | Not available. | Taste                 | Not available.                    |

### Section X. Stability and Reactivity Data

Stability This material is stable if stored under proper conditions. (See Section VII for instructions)

Conditions of Instability Avoid excessive heat and light.

Incompatibilities Reactive with strong oxidizing agents.

### Section XI. Toxicological Information

RTECS Number KJ5425000

Routes of Exposure Eye contact. Inhalation. Ingestion.

Toxicity Data Rat LD<sub>50</sub> (oral) 3050 mg/kg  
Mouse LD<sub>50</sub> (intraperitoneal) 250 mg/kg  
Mouse LDLo (parenteral) 2000 mg/kg

Chronic Toxic Effects **CARCINOGENIC EFFECTS** : Not available.  
**MUTAGENIC EFFECTS** : Not available.  
**TERATOGENIC EFFECTS** : Not available.  
**DEVELOPMENTAL TOXICITY** Not available.  
There is no known effect from chronic exposure to this product. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.

Acute Toxic Effects No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound.

**Section XII. Ecological Information**

|                    |                |
|--------------------|----------------|
| Ecotoxicity        | Not available. |
| Environmental Fate | Not available. |

**Section XIII. Disposal Considerations**

|                |  |
|----------------|--|
| Waste Disposal | Recycle to process, if possible. Consult your local or regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state, and local regulations when disposing of this substance. |
|----------------|--|

**Section XIV. Transport Information**

|                      |   |
|----------------------|---|
| DOT Classification   | DOT CLASS 3: Flammable liquid.  |
| PIN Number           | UN3271  |
| Proper Shipping Name | Ethers, n.o.s.  |
| Packing Group (PG)   | III   |
| DOT Pictograms       |  |

**Section XV. Other Regulatory Information and Pictograms**

|                               |   |
|-------------------------------|---|
| TSCA Chemical Inventory (EPA) | This product is <b>ON</b> the EPA Toxic Substances Control Act (TSCA) inventory.                  |
| WHMIS Classification (Canada) | WHMIS CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). |
| EINECS Number (EEC)           | 203-871-1   |
| EEC Risk Statements           | R12- Extremely flammable.   |
| Japanese Regulatory Data      | Not available.  |

**Section XVI. Other Information**

**Version 1.0**  
**Validated on 7/10/1997.**  
**Printed 2/17/2005.**

**Notice to Reader**

TCI laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, household, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.