

#### Revision number: 2 Revision date: 10/06/2014

## 1. IDENTIFICATION

Diethyl	ene Glycol Monovinyl Ether (stabilized with KOH)
D2623	

**TCI AMERICA** 

SAFETY DATA SHEET

Product use: Restrictions on use:

Product name: Product code:

For laboratory research purposes. Not for drug or household use.

Company:	Emergency telephone number:
TCI America	Chemical Emergencies:
9211 N. Harborgate Street	TCI America (8:00am - 5:00pm) PST
Portland, OR 97203 U.S.A.	+1-503-286-7624
Telephone:	Transportation Emergencies:
+1-800-423-8616 / +1-503-283-1681	Chemtrec 24-Hour
Fax:	+1-800-424-9300 (U.S.A.)
+1-888-520-1075 / +1-503-283-1987	+1-703-527-3887 (International)
e-mail:	Responsible department:
sales-US@TCIchemicals.com	TCI America
www.TCIchemicals.com	Environmental Health Safety and Security +1- 503-286-7624

## 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:	Flammable Liquids [Category 4]
Signal word:	Warning!
Hazard Statement(s):	Combustible liquid
Pictogram(s) or Symbol(s):	None
Precautionary Statement(s): [Prevention] [Response]	Keep away from heat, sparks, open flames or other hot surfaces No smoking. Wear protective gloves, eye protection and face protection. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.
[Storage] [Disposal]	Store in well-ventilated place. Keep cool. Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

Hazards not otherwise classified: [HNOC] May cause polimerization. May be harmful if swallowed.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:	Substance
Components:	Diethylene Glycol Monovinyl Ether (stabilized with KOH)
Percent:	>96.0%(GC)
CAS Number:	929-37-3
Molecular Weight:	132.16
Chemical Formula:	CeH <sub>12</sub> O <sub>3</sub>
Synonyms:	Vinyl Carbitol (stabilized with KOH) , 2-(2-Vinyloxyethoxy)ethanol (stabilized with KOH)
Stabilizers:	Potassium hydroxide

## 4. FIRST-AID MEASURES

Inhalation:

Call emergency medical service. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4. FIRST-AID MEASURES	
Skin contact:	Call a poison center or doctor if you feel unwell. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Eye contact:	In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Ingestion:	If swallowed, seek medical advice immediately and show the container or label. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Symptoms/effects:	
Acute: Delayed:	No data available No data available
Immediate medical attention:	If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, $CO_2$ , water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the chen Hazardous combustion products: Other specific hazards:	nical These products include: Carbon oxides Closed containers may explode from heat of a fire.
Special precautions for fire-fighters:	

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. Use water spray or fog; do not use straight streams. Do not use straight streams. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Move containers from fire area if you can do it without risk.

## Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use spark-proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Personal protective equipment:	Splash goggles. Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).
Emergency procedures:	Isolate area until gas has dispersed. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

#### Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded. Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

# 7. HANDLING AND STORAGE

Precautions for safe handling: Do NOT breath gas, fumes, vapor, or spray. Avoid contact with skin and eyes. Keep away from heat and sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic charge. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.

T. HADUING AND STORAGE      Conditions for safe storage:    Keep only in the original container in a cool well-ventilated place. Keep away from sources of ignition incompatible. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.      Storage incompatibilities:    Combustible substances. Store away from oxidizing agents      8. EXPOSURE CONTROLS / PERSONAL PROTECTION    Exposure limits:      8. EXPOSURE engineering controls:    Good general venitation is normally required when handling or using this product. Eyewas      6. Odd general venitations should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewas      Bespiratory protection:    Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Head protection:      9. PHYSICAL AND CHEMICAL PROPERTIES      Physical state (20°C):    Liquid      Colores - Almost colorless    Odd as available      Odor threebold:    No data available      Metting point/respirator:    No data available      Odor threebold:    No data available      Odor threebold:    No data available      9. PHYSICAL AND CHEMICAL PROPERTIES    No data available      Physical state (20°C):    Liquid      Color:    Colorless - Almost colorl	Diethylene Glycol Monovinyl Et with KOH)	her (stabilized TCI AMI	ERICA	Page 3 of 5
conditions for safe storage:  Keep only in the original container in a cool well-ventilated place. Keep away from sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition sources. Keep away from incompatible. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid profonged storage periods.    ktorage incompatibilities:  Combustible substances. Store away from oxidizing agents    8. EXPOSURE CONTROLS / PERSONAL PROTECTION    Exposure limits:  No data available    upprepriate engineering controls:    cond particulation is normally required when handling or using this product. Eyewas    cond particulation is normally required when handling or using this product. Eyewas    propertities:  Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.    tand protection:  Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.    tand protection:  Upper protection:    by protection:  Explanacy protection:    by protection:  Lab coat.    by protection:  Clear    condition point/freezing point:  No data available    by threshold:  No data available    by any of threshold:  No data available    by any of threshold:  No data available    by any of threshold:	. HANDLING AND STORAG	<u>GE</u>		
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Appropriate engineering controls:    Sood general vertilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewas sountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial ingineering/laboratory practices when handling any chemical.    Versional protection:  Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves.    Very protection:  Splash goggles.    Skin and body protection:  Lab coat.    2. PHYSICAL AND CHEMICAL PROPERTIES    Physical state (20°C):  Liquid    corr:  Colorless - Almost colorless    Door:  No data available    Melting point/freezing point:  No data available    Versonsition temperature:  No data available    Vapor trespirator.  No data available    Vapor trespirator:  No data available    Vapor density:  No data availabl	B. EXPOSURE CONTROLS /	PERSONAL PROTECTION	V	
Sodd general verifitation is should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewass ourtains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial using incerting/laboratory practices when handling any chemical.    Personal protection:  Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves.    Spiratory protection:  Spiratory protection:    Spiratory protection:  Spiratory gloves.    Spiratory protection:  Spiratory gloves.    Spiratory protection:  Spiratory gloves.    Spiratory protection:  Spiratory gloves.    Spiratory protection:  Lab coat.    Spiratory protection:  Lab coat.    Spiratory protection:  Lab coat.    Spiratory protection:  Coloriess - Almost coloriess    Spiratory protection:  Coloriess - Almost coloriess    Solor:  Coloriess - Almost coloriess    Solor:  No data available    Vapor respirator  No data available    Vapor density:  No data available	Exposure limits:	No data available		
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tand protection: Wear protective gloves. Splash goggles. Lab coat. DeptYSICAL AND CHEMICAL PROPERTIES Physical state (20°C): Liquid form: Clear Coloriess - Almost colorless Door: Colorless - Almost colorless Door: Colorless - Almost colorless Door threshold: No data available PH: No data available Melting point/freezing point: No data available Door threshold: No data available Melting point/freezing point: No data available Melting point/freezing point: No data available Melting point/freezing point: No data available Vapor pressure: No data available Vapor density: No data available Dynamic Viscosity: No data available PH: No data available Meltative density: No data available PH: No data available No data available Meltative density: No data available PH: No data available Vapor pressure: No data available Physicosity: No data availab	ersonal protective equipment			
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Form:  Cléar    Color:  Colorless - Almost colorless    Solor:  No data available    No data available  No data available    Adeting point/freezing point:  No data available    Soling point/range:  96°C (205°F)/1.6kPa    Pacomposition temperature:  No data available    Vapor pressure:  No data available    Vapor density:  No data available    Vapor density:  No data available    Cinematic Viscosity:  No data available    Partition coefficient:  No data available    No data available  Vapor density:  No data available    Careative density:  No data available  Vapor density:  No data available    Careative density:  No data available  Vapor density:  No data available    Careative density:  No data available  Evaporation rate:  No data available    Careative density:  No data available  Evaporation temperature:  No data available    Partition coefficient:  No data available  Evaporation temperature:  No data available    Flash point:  82°C (180°F)  Autoignition temperature:  No data available <td>9. PHYSICAL AND CHEMIC</td> <td>AL PROPERTIES</td> <td></td> <td></td>	9. PHYSICAL AND CHEMIC	AL PROPERTIES		
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I-octanol/water (log Pow)  (Butyl Acetate = 1)    Itash point:  82°C (180°F)    Itammability (solid, gas):  No data available    Flammability (solid, gas):  No data available    Flammability (solid, gas):  No data available    Flammability (solid, gas):  No data available    Edubility(ies):  Water: Soluble    Water:  Solubility(ies):    Water:  Solubility:    Not Available.    Schemical Stability:  Not Available.    Solubility of Hazardous Reactions:  In use, may form flammable/explosive vapor-air mixture.    Conditions to avoid:  Avoid excessive heat and light.    Aroond excessive heat and light.  Strong oxidizing agents	Boiling point/range: Decomposition temperature: Relative density:	96°C (205°F)/1.6kPa No data available 1.03	Vapor pressure: Vapor density:	No data available No data available
Hammability (solid, gas):  No data available  Flammability or explosive limits: Lower:  No data available    Bolubility(ies): Water: Soluble  Upper:  No data available    Mater: Soluble  Not Available.    Schemical Stability:  Stable under recommended storage conditions. (See Section 7)    Possibility of Hazardous Reactions:  In use, may form flammable/explosive vapor-air mixture.    Avoid excessive heat and light.  Avoid excessive heat and light.    Strong oxidizing agents  Strong oxidizing agents		No data available		No data available
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Reactivity:  Not Available.    Chemical Stability:  Stable under recommended storage conditions. (See Section 7)    Ossibility of Hazardous Reactions:  In use, may form flammable/explosive vapor-air mixture.    Conditions to avoid:  Avoid excessive heat and light.    ncompatible materials:  Strong oxidizing agents				
Conditions to avoid:  Stable under recommended storage conditions. (See Section 7)    In use, may form flammable/explosive vapor-air mixture.    Avoid excessive heat and light.    Strong oxidizing agents	0. STABILITY AND REACT	IVITY		
	Chemical Stability: Possibility of Hazardous Reacti Conditions to avoid: ncompatible materials:	ons: Stable under recon In use, may form fla Avoid excessive he Strong oxidizing ag	ammable/explosive vapor-air mixture.	tion 7)
11. TOXICOLOGICAL INFORMATION	11. TOXICOLOGICAL INFOR	RMATION		

RTECS Number: KM5495500

Diethylene Glycol Monovinyl Ether (stabil with KOH)	ized TCI AMERICA	Page 4 of 5
Acute Toxicity: orl-mus LD50:4450 mg/kg	orl-rat LD50:4930 mg/kg	
<b>Skin corrosion/irritation:</b> No data available		
Serious eye damage/irritation: No data available		
<b>Respiratory or skin sensitization:</b> No data available		
Germ cell mutagenicity: No data available		
Carcinogenicity:		
No data available		
IARC: No data available	NTP: No data available OSHA: No data available	
<b>Reproductive toxicity:</b> No data available		
Routes of Exposure: Symptoms related to exposure: Overexposure may result in serious illness o Potential Health Effects:	Inhalation, Eye contact, Ingestion. or death.	
May be harmful if inhaled or ingested. Overe <b>Target organ(s):</b>	exposure may result in serious illness or death. No data available	
12. ECOLOGICAL INFORMATION		
Ecotoxicity	No. data ang Tabla	
Fish: Crustacea:	No data available No data available	
Algae:	No data available	
Persistence and degradability:	No data available	
Bioaccumulative potential (BCF): Mobillity in soil:	No data available No data available	
Partition coefficient: n-octanol/water (log Pow)	No data available	
Soil adsorption (Koc):	No data available	
Henry's Law: constant (PaM³/mol)	No data available	
13. DISPOSAL CONSIDERATIONS		
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State a rules and regulations. You may be able to dissolve or mix material with a combustible solvent at chemical incinerator equipped with an afterburner and scrubber system. This section is intender assistance but does not replace these laws, nor does compliance in accordance with this sectio regulatory compliance according to the law. US EPA guidelines for Identification and Listing of H Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environm water ways, or the soil.	nd burn in a d to provide n ensure Hazardous
Disposal of container: Other considerations:	Dispose of as unused product. Do not re-use empty containers. Observe all federal, state and local regulations when disposing of the substance.	
14. TRANSPORT INFORMATION		
DOT (US)	Non-hazardous for transportation.	
ΙΑΤΑ	Non-hazardous for transportation.	
IMDG	Non-hazardous for transportation.	

## 15. REGULATORY INFORMATION

## Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

#### **US Federal Regulations**

**CERCLA Hazardous substance and Reportable Quantity:** 

SARA 313:	Not Listed
SARA 302:	Not Listed

#### **State Regulations**

State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

#### **Other Information**

#### **NFPA Rating:**

Health:	0
Flammability:	2
Instability:	0

#### International Inventories

WHMIS hazard class:

B3: Combustible Liquid.

## **16. OTHER INFORMATION**

## Revision date: 10/06/2014

**Revision number: 2** 

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, 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 affiliates or 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 SDS 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 SDS 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, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.

**HMIS Classification:** Health:

Flammability:

Physical:

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