

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Explosion Hazards

Vapor may travel considerable distance to source of ignition and flash back.

Container explosion can occur under fire conditions. In advanced or massive fires the area should be evacuated and the fire should be fought from a remote explosion-resistant location.

Flash Point:	41 °F	5 °C
Explosion Limits:	Lower: 1.6 %	Upper: 10.4 %
Autoignition Temp:	202 °C	Flammability: N/A

Extinguishing Media

Suitable

Carbon dioxide, dry chemical powder, or appropriate foam.

Unsuitable

Water may be effective for cooling, but may not effect extinguishment.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Flammable liquid. Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill

Evacuate area. Shut off all sources of ignition.

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Cover with an activated carbon adsorbent, take up and place in closed containers. Transport outdoors. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure

Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep container closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Use nonsparking tools. Use only in a chemical fume hood.

Personal Protective Equipment

Respiratory

NIOSH/MSHA-approved respirator.

Section 14 - Transport Information

DOT

Proper Shipping Name: 1,2-Dimethoxyethane

UN#: 2252

Class: 3

Packing Group: Packing Group II

PIH: Not PIH

IATA

Proper Shipping Name: 1,2-Dimethoxyethane

IATA Number: 2252

Hazard Class: 3

Packing Group: II

Section 15 - Regulatory Information

EU Directives Classification

Symbol of Danger: Xn

Indication of Danger

Harmful.

Risk Statements

R: 10 19 20

Flammable. May form explosive peroxides. Harmful by inhalation.

Safety Statements

S: 24/25

Avoid contact with skin and eyes.

US Classification and Label Text

Indication of Danger

Flammable (USA) Highly Flammable (EU). Harmful.

Risk Statements

May form explosive peroxides. Harmful by inhalation, in contact with skin and if swallowed. Possible risk of harm to the unborn child.

Safety Statements

Keep away from sources of ignition - no smoking. Wear suitable protective clothing. Do not breathe vapor.

US Statements

Target organ(s): Liver. Kidneys.

Handling and Storage

Store under nitrogen.

United States Regulatory Information

SARA 313 Listed: Yes

Deminimis: 1.0 %

Notes: This product is subject to SARA section 313 reporting requirements - glycol ethers.

TSCA Inventory Item: Yes

Section 16 - Other Information

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 1999 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles.

General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance**Color**

Colorless

Form

Clear liquid

Molecular Weight: 90.12 AMU

<u>Property</u>	<u>Value</u>	<u>At Temperature or Pressure</u>
pH	N/A	
BP/BP Range	85 °C	760 mmHg
MP/MP Range	-58 °C	
Freezing Point	N/A	
Vapor Pressure	48 mmHg	20 °C
Vapor Density	3.1 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	0.867 g/cm3	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point °F	41 °F	
Flash Point °C	5 °C	
Explosion Limits	Lower: 1.6 % Upper: 10.4 %	
Autoignition Temp	202 °C	
Refractive Index	1.379	
Solubility	N/A	

Section 10 - Stability and Reactivity

Stability**Reactions to Avoid**

Test for peroxide formation periodically and before distillation.

Conditions to Avoid

Forms explosive peroxides on prolonged storage Heat and light accelerate peroxide formation.

Materials to Avoid

Oxidizing agents, Strong acids.

Hazardous Decomposition Products**Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide.

Hazardous Polymerization**Hazardous Polymerization**

Will not occur.