

## SAFETY DATA SHEET

Creation Date 23-Mar-2012 Revision Date 18-Dec-2025 Revision Number 7

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

1. Identification

Product Name 2-Ethoxyethyl ether

Cat No.: AC117900000; AC117900010; AC117900025; AC117900100;

AC117900250; AC117905000

CAS No 112-36-7

Synonyms Diethyl Carbitol®; Bis(2-ethoxyethyl) ether; Diethylene glycol diethyl ether

Recommended Use Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

## Details of the supplier of the safety data sheet

Company

Fisher Scientific Company Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

Tel: (201) 796-7100

## **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

## Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

Flammable liquids Category 4
Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2

## Label Elements

## Signal Word

Warning

#### **Hazard Statements**

Combustible liquid Causes skin irritation

#### Causes serious eye irritation



#### **Precautionary Statements**

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

#### Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

#### Fire

In case of fire: Use CO2, dry chemical, or foam to extinguish

## Storage

Store in a well-ventilated place. Keep cool

#### Disposal

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

None identified

## Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

## 3. Composition/information on Ingredients

	Component	CAS No	Weight %
ĺ	Diethylene glycol diethyl ether	112-36-7	> 95

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and

effects

. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam. Water mist may be used

to cool closed containers.

Unsuitable Extinguishing Media No information available

**Flash Point** 82 °C / 179.6 °F

Method - No information available

**Autoignition Temperature** 215 °C / 419 °F

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Combustible material. Flammable. Containers may explode when heated.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2).

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	2	0	N/A

## Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Remove all

sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Should not be released into the environment.

**Methods for Containment and Clean** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. **Up** Remove all sources of ignition.

7. Handling and Storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open

flames, hot surfaces and sources of ignition.

**Storage.** Containers should be dated when opened and tested periodically for the presence of

peroxides. Keep under nitrogen. Purge open drums with nitrogen before resealing. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals. Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials.

Strong oxidizing agents. Strong acids.

## 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures None under normal use conditions. Ensure adequate ventilation, especially in confined

areas.

Personal Protective Equipment

**Eye/face Protection** 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

Liquid

Method

EN166.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter.

**Hygiene Measures**Handle in accordance with good industrial hygiene and safety practice.

## Physical and chemical properties

<u>Appearance</u>

Physical State Liquid Color Colorless

Odor No information available
Odor Threshold No information available

Property Values Remarks

Melting Point/Range -44.3 °C / -47.7 °F

Softening Point No data available

Boiling Point/Range 180 - 190 °C / 356 - 374 °F @ 760 mmHg

Flash Point 82 °C / 179.6 °F Method - No information available

Flammability (liquid) Combustible liquid On basis of test data

Flammability (solid,gas)

Explosion Limits

Not applicable

No data available

Autoignition Temperature 215 °C / 419 °F

Decomposition Temperature

PH

No data available

No information available

Viscosity

1.4 cP at 20 °C

Water Solubility Soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow
Diethylene glycol diethyl ether 0.39

Vapor Pressure 0.48 mmHg @ 20 °C

Density / Specific Gravity 0.900

Bulk DensityNot applicableLiquidVapor Density5.6(Air = 1.0)

Particle characteristics Not applicable (liquid)

Other Information

Molecular Formula C8 H18 O3 Molecular Weight 162.23

**Explosive Properties** explosive air/vapour mixtures possible

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** No information available.

Conditions to Avoid Excess heat. Exposure to air. Incompatible products. Keep away from open flames, hot

surfaces and sources of ignition.

Incompatible Materials Strong oxidizing agents, Strong acids

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous PolymerizationNo information available.Hazardous ReactionsNo information available.

## 11. Toxicological information

## Information on expected route of exposure

InhalationNot an expected route of exposure.IngestionMay be harmful if swallowed.

**Eyes**Avoid contact with eyes. May cause irritation. **Skin**Avoid contact with skin. May cause irritation.

## Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diethylene glycol diethyl ether	LD50 = 4970 mg/kg (Rat)	-	-

**Toxicologically Synergistic** 

**Products** 

No information available

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity;

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Diethylene glycol	112-36-7	Not listed				
diethyl ether						

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

Revision Date 18-Dec-2025 2-Ethoxyethyl ether

No data available (i) STOT-repeated exposure;

No information available. **Target Organs** 

No data available (j) aspiration hazard;

Other Adverse Effects The toxicological properties have not been fully investigated.

delayed

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

## 12. Ecological information

**Ecotoxicity** 

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Diethylene glycol diethyl ether	0.39

## 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

COMBUSTIBLE LIQUID, NOT REGULATED FOR TRANSPORT IN THIS QUANTITY DOT

According to 49 CFR §173.150(f)(1), this material should reclassified as NA1993,

Combustible Liquid, NOS if it is shipped in bulk

NA1993 **UN-No** 

**Proper Shipping Name** Combustible liquid, n.o.s.

**Packing Group** 

TDG Not regulated IATA Not regulated IMDG/IMO Not regulated

## 15. Regulatory Information

## **United States of America Inventory**

Component	CAS No	TSCA	TSCA TSCA Inventory notification -	
			Active-Inactive	Flags
Diethylene glycol diethyl ether	112-36-7	Χ	ACTIVE	S

## Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- '-' Not Listed
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule.

## TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Component	CAS No	TSCA 12(b) - Notices of Export
Diethylene glycol diethyl ether	112-36-7	Section 5(a)(2)

#### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Diethylene glycol diethyl ether	112-36-7	Χ	-	203-963-7	Χ	Χ	Х	Х	Χ	KE-03123

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS No	Weight %	SARA 313 - Threshold Values %	SARA 313 - Reporting threasholds
Diethylene glycol diethyl ether	112-36-7	> 95	1.0 %	-

## SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

## **CWA (Clean Water Act)**

Not applicable

#### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Diethylene alycol diethyl ether	X		-

**OSHA** - Occupational Safety and

Health Administration

Not applicable

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**California Proposition 65** 

This product does not contain any Proposition 65 chemicals.

# U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Diethylene glycol diethyl	-	X	X	X	-
ether					

**U.S. Department of Transportation** 

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Diethylene glycol diethyl ether	112-36-7	-	-	-

## Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Diethylene glycol diethyl ether	112-36-7	Not applicable	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

### Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Diethylene glycol diethyl ether	112-36-7	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other Information

Prepared By Product stewardship (Regulatory Affairs)

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 23-Mar-2012

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**Revision Summary** Updated to the U.S. Department of Labor's Occupational Safety and Health Administration

(OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200,

2024), May 20, 2024, effective July 19, 2024.

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the

date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**