



Fragrance Supplies

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

DEGME

Version 6.0

Print Date 2023/07/11

Revision date / valid from 2023/07/11

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : DEGME - Diethylene Glycol MonoEthyl Ether
Substance name : 2-(2-Ethoxyethoxy)ethanol
CAS-No. : 111-90-0
EC-No. : 203-919-7
EU REACH-Reg. No. : 01-2119475105-42-xxxx

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Chemical industry in general
Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : R&D Laboratories Ltd
Unit 11 Moira Industrial Estate
Moira, BT67 0LZ United Kingdom
Telephone : +44 (0) 330 179 7627
E-mail address : support@rdlabs.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number (open 24 hours):
+44 (0) 1865 407333 (N.C.E.C. Culham)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation S.I. 2019/720 (GB CLP)

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

Most important adverse effects

Human Health : See section 11 for toxicological information.
Physical and chemical hazards : See section 9/10 for physicochemical information.

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Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation S.I. 2019/720 (GB CLP)

The product is not labeled as dangerous according to Regulation (EC) No. 1272/2008.

Additional Labelling:

Handle in accordance with good industrial hygiene and safety practice.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: No information available about endocrine disruption properties for environment.

Toxicological information: No information available about endocrine disruption properties for human health.

Combustible liquid. If heated above flash point, the vapours may form an explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.1. Substances

Remarks : No dangerous ingredients according to Regulation (EC) No. 1907/2006

Non-hazardous component

Chemical name	Identification Number	Amount [%]
2-(2-Ethoxyethoxy)ethanol	CAS-No. : 111-90-0 EC-No. 203-919-7 REACH-Reg. No. 01-2119475105-42-xxxx	<= 100

SECTION 4: First aid measures

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4.1. Description of first aid measures

General advice	: Move out of dangerous area. Take off all contaminated clothing immediately.
If inhaled	: Remove to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Wash off with soap and water. If skin irritation persists, call a physician.
In case of eye contact	: Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If symptoms persist, call a physician.
Protection of First Aid Responders	: First Aid responders should pay attention to self-protection and use the recommended protective clothing.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	: See Section 11 for more detailed information on health effects and symptoms.
Effects	: May irritate skin. May cause irritation of the mucous membranes. See Section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment	: In case of accidental inhalation apply glucocorticoid inhalation spray. Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray, foam, dry powder or CO ₂ .
Unsuitable extinguishing media	: High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	: Combustible liquid. In case of fire hazardous decomposition products may be produced such as:
Hazardous combustion products	: Carbon monoxide, Carbon dioxide (CO ₂)

5.3. Advice for firefighters

Special protective	: In the event of fire, wear self-contained breathing
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equipment for firefighters : apparatus. Choose protective equipment according to size of fire.

Further advice : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If material reaches soil inform authorities responsible for such cases. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal.

Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.

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Advice on protection against fire and explosion : Combustible liquid. Keep away from heat and sources of ignition. Normal measures for preventive fire protection.

Further information on storage conditions : Keep tightly closed in a dry and cool place.

Advice on common storage : Keep away from food, drink and animal feedingstuffs.

Suitable packaging materials : Stainless steel, Polypropylene

Unsuitable packaging materials : , Aluminium, Copper

7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Occupational Exposure Limit Values

(Additional) Information : Contains no substances with occupational exposure limit values.

Contains no substances with occupational exposure limit values.

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
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Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - systemic effects, Skin contact : 50 mg/kg bw/day

DNEL
Workers, Long-term - systemic effects, Inhalation : 37 mg/m³

DNEL
Workers, Long-term - local effects, Inhalation : 18 mg/m³

DNEL
Consumers, Long-term - systemic effects, Skin contact : 25 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 18.3 mg/m³

DNEL
Consumers, Long-term - systemic effects, Ingestion : 25 mg/kg bw/day

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DNEL
Consumers, Long-term - local effects, Inhalation : 9 mg/m³

Predicted No Effect Concentration (PNEC)

Fresh water : 0.74 mg/l
Marine water : 0.074 mg/l
Intermittent releases : 10 mg/l
Sewage treatment plant (STP) : 500 mg/l
Fresh water sediment
Related to, dry weight : 2.47 mg/kg
Marine sediment
Related to, dry weight : 0.274 mg/kg
Soil
Related to, dry weight : 0.15 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice : Required, if exposure limit is exceeded (e.g. OEL).
Required if vapours or aerosol are released.
Respiratory protection complying with EN 141.
Filter Type : Type A

Hand protection

Advice : Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.
Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Protective gloves should be replaced at first signs of wear.

Material : butyl-rubber
Break through time : ≥ 8 h
Glove thickness : 0.5 mm

Material : Fluorinated rubber

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Break through time : ≥ 8 h
Glove thickness : 0.4 mm

Eye protection

Advice : Safety goggles

Skin and body protection

Advice : Protective work clothing

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If material reaches soil inform authorities responsible for such cases.
If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : liquid

Physical state : liquid

Colour : colourless

Odour : mild

Odour Threshold : 1.1 ppm

Melting point/range : -54 °C

Boiling point/boiling range : 196 °C

Flammability (solid, gas) : Product is a liquid, see section 9.2.
Remarks: Flammable liquid with a flash point >60 - ≤ 100 °C.

Upper explosion limit / Upper flammability limit : 23.5 %(V)

Lower explosion limit / Lower flammability limit : 1.2 %(V)

Flash point : 91 °C

Auto-ignition temperature : 204 °C

Decomposition temperature : No data available

Self-Accelerating : No data available

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decomposition temperature
(SADT)

pH : not determined

Viscosity

Viscosity, dynamic : 4.4 mPa.s (20 °C)

Viscosity, kinematic : No data available

Flow time : No data available

Solubility(ies)

Water solubility : completely miscible

Solubility in other solvents : No data available

Dissolution Rate : No data available

Partition coefficient: n-
octanol/water : log Pow: -0.54

Dispersion Stability : No data available

Vapour pressure : 0.17 hPa (20 °C)

Relative density : No data available

Density : 0.99 g/cm³ (20 °C)

Bulk density : No data available

Relative vapour density : No data available

Particle characteristics
No data available

9.2 Other information

Explosives : Formation of explosive air/vapour mixtures is possible.

Oxidizing properties : not oxidising

Flammability (liquids) : Combustible liquid.
Remarks: Flammable liquid with a flash point >60 - <=100 °C.

Evaporation rate : 0.01
(Butyl Acetate = 1)

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

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10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Gives off hydrogen by reaction with metals. Reacts with air to form peroxides. Reacts with: Aluminium Oxidizing agents

10.4. Conditions to avoid

Conditions to avoid : Heat, flames and sparks.
Thermal decomposition : No data available

10.5. Incompatible materials

Materials to avoid : Aluminium, Incompatible with oxidizing agents. Metals, Peroxides, Strong acids and strong bases

10.6. Hazardous decomposition products

Hazardous decomposition products : Fire may cause evolution of: Carbon oxides

SECTION 11: Toxicological information

11.1. Information on the hazard classes within the meaning of Regulation (EC) No. 1272/2008

Data for the product

Irritation

Skin

Result : Causes skin irritation.

Eyes

Result : Splash in the eyes may cause discomfort.

Component: 2-(2-Ethoxyethoxy)ethanol

CAS-No. 111-90-0

Acute toxicity

Oral

LD50 : 6031 mg/kg body weight(Mouse) (OECD Test Guideline 401)

Inhalation

LC0 : 0.025 mg/l (Rat, male and female; 8 h; vapour)

Dermal

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LD50 : 9143 mg/kg (Rabbit, male) (OECD Test Guideline 402)

Irritation

Skin

Result : No skin irritation (Rabbit) (OECD Test Guideline 404)

Eyes

Result : No eye irritation (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result : Study scientifically not justified.

CMR effects

CMR Properties

Carcinogenicity : Animal testing did not show any carcinogenic effects.
Mutagenicity : In vitro tests did not show mutagenic effects
In vivo tests did not show mutagenic effects
Teratogenicity : Causes developmental effects in animals at high doses.
Reproductive toxicity : Animal testing did not show any effects on fertility.

Specific Target Organ Toxicity

Single exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

No aspiration toxicity classification,

11.2. Information on other hazards

Data for the product

Endocrine disrupting properties

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Assessment : No information available about endocrine disruption properties for human health.

SECTION 12: Ecological information

12.1. Toxicity

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
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Acute toxicity

Fish

LC50 : 6,010 mg/l (Ictalurus punctatus; 96 h) (flow-through test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 1,982 mg/l (Daphnia magna (Water flea); 48 h) (static test; OECD Test Guideline 202)

algae

EC50 : > 100 mg/l (Desmodesmus subspicatus (green algae); 96 h) (static test; OECD Test Guideline 201)

Bacteria

IC50 : > 5000 mg/l (Bacteria; 16 h) (static test)

12.2. Persistence and degradability

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
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Persistence and degradability

Persistence

Result : No data available

Biodegradability

Result : 79.4 % (activated sludge; Related to: CO₂ formation (% of the theoretical value).; Exposure Time: 12 d)(OECD Test Guideline

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301B) Readily biodegradable.

12.3. Bioaccumulative potential

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
Bioaccumulation		

Result : log Kow -0.54
: BCF: < 100; log Pow < 1
Bioaccumulation is not expected.

12.4. Mobility in soil

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
Mobility		

: Highly mobile in soils

12.5. Results of PBT and vPvB assessment

Data for the product		
Results of PBT and vPvB assessment		

Result : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
Results of PBT and vPvB assessment		

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6. Endocrine disrupting properties

Data for the product		
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Endocrine disrupting potential : No information available about endocrine disruption properties for environment.

12.7. Other adverse effects

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
Additional ecological information		

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Result : Avoid subsoil penetration.
Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.
- Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number or ID number

|| Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
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EU. Chemicals Subject : ; The substance/mixture does not fall under this legislation.
to PIC Procedure:
Regulation 649/2012/EU
on export and import of
dangerous chemicals, as
amended

EU. REACH, Annex XVII, : ; Not listed
Marketing and Use
Restrictions (Regulation
1907/2006/EC)

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
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EU. Regulation No. : Reference number: 297; Listed
1223/2009 on cosmetic
products, Annex III: List
of Restricted Substances
in Cosmetic Products

Component:	2-(2-Ethoxyethoxy)ethanol	CAS-No. 111-90-0
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EU. Directive : ; The substance/mixture does not fall under this legislation.
2012/18/EU (SEVESO
III) on major accident
hazards involving
dangerous substances,
Annex I

Germany. Ordinance on : WGK 1: slightly hazardous to water: 101
Facilities Handling
Substances that are
Hazardous to Water,
(AwSV of 21 April 2017),
UBA, BAnz AT), as
amended

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Notification status

2-(2-Ethoxyethoxy)ethanol:

Regulatory List	Notification	Notification number
EINECS	YES	203-919-7
DSL	YES	
KECI (KR)	YES	KE-10467
ENCS (JP)	YES	(2)-422
ENCS (JP)	YES	(7)-97
ISHL (JP)	YES	(2)-422
ISHL (JP)	YES	(7)-97
INSQ	YES	
IECSC	YES	
ONT INV	YES	
TCSI	YES	
PICCS (PH)	YES	
TSCA	YES	
VN INV L	YES	
TH INV	YES	2909.44
TH INV	YES	55-1-00705
AU AIICL	YES	
NZIOC	YES	

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Abbreviations and Acronyms

AU AIICL	Australia. Industrial Chemicals Act (AIC) List
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances

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ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
UK REACH Auth. No.:	UK REACH Authorisation Number
UK REACH AuthAppC. No.	UK REACH Authorisation Application Consultation Number
UK REACH-Reg.No	UK REACH Registration Number
STOT	specific target organ toxicity
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VN INVL	Vietnam. National Chemical Inventory
vPvB	very persistent and very bioaccumulative

Further information

Key literature references : Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Methods used for : The classification for human health, physical and chemical

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product classification		hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings	:	The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.
Other information	:	<p>The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.</p> <p>The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.</p>

|| Indicates updated section.