According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

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

#### 1.1 Product identifier

Trade name : Ethylene Glycol Fiber Grade

Product code : U1285

Registration number EU : 01-2119456816-28-0001, 01-2119456816-28-0002

CAS-No. : 107-21-1

Other means of identification : Dihydroxy ethane 1,2, Ethane diol 1,2, Ethylene Glycol, Gly-

col, MEG

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

Use of the Sub- : Chemical intermediate.

stance/Mixture Please refer to section 16 and/or the annexes for the regis-

tered uses under REACH.

Uses advised against : This product must not be used in applications other than the

above without first seeking the advice of the supplier., Do not use in the manufacture or preparation of foods or pharmaceuticals., Keep out of reach of children and pets., Do not use in theatrical fogs or other artificial smoke generator applications..

Do not use in aircraft deicing applications.

This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the sup-

plier.

## 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier : Shell Chemicals Europe B.V.

PO Box 2334 3000 CH Rotterdam

Netherlands

Telephone : +31 (0)10 441 5137 / +31 (0)10 441 5191 Telefax : +31 (0)20 716 8316 / +31 (0)20 713 9230

Contact for Safety Data : sccmsds@shell.com

Sheet

## 1.4 Emergency telephone number

+44 (0) 1235 239 670 (24/7)

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4, Oral H302: Harmful if swallowed.

Specific target organ toxicity - repeated exposure, Category 2, Kidney

H373: May cause damage to organs through prolonged or repeated exposure.

#### 2.2 Label elements

## Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :





Signal word : Warning

Hazard statements : PHYSICAL HAZARDS:

Not classified as a physical hazard according to CLP

criteria.

HEALTH HAZARDS: H302 Harmful if swallowed.

H373 May cause damage to organs (Kidney) through pro-

longed or repeated exposure.

**ENVIRONMENTAL HAZARDS:** 

Not classified as environmental hazard according to

CLP criteria.

Precautionary statements : Prevention:

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER/

doctor if you feel unwell. P330 Rinse mouth.

P314 Get medical advice/ attention if you feel unwell.

Storage:

No precautionary phrases.

Disposal:

P501 Dispose of contents/ container to an approved waste

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

disposal plant.

#### 2.3 Other hazards

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation of vapours or mists may cause irritation to the respiratory system.

Slightly irritating to respiratory system.

Slightly irritating to the skin.

Slightly irritating to the eye.

Vapours may be irritating to the eye.

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Components

| Chemical name | CAS-No.             | Classification     | Concentration |
|---------------|---------------------|--------------------|---------------|
|               | EC-No.              |                    | (% w/w)       |
|               | Index-No.           |                    |               |
|               | Registration number |                    |               |
| ethanediol    | 107-21-1            | Acute Tox. 4; H302 | 99 - 100      |
|               | 203-473-3           | STOT RE 2; H373    |               |
|               | 603-027-00-1        | (Kidney)           |               |
|               | 01-2119456816-28    |                    |               |

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

General advice : Not expected to be a health hazard when used under normal

conditions.

Protection of first-aiders : When administering first aid, ensure that you are wearing the

appropriate personal protective equipment according to the

incident, injury and surroundings.

If inhaled : Remove to fresh air. If rapid recovery does not occur,

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

transport to nearest medical facility for additional treatment.

In case of skin contact : Remove contaminated clothing. Flush exposed area with wa-

ter and follow by washing with soap if available.

If persistent irritation occurs, obtain medical attention.

In case of eye contact : Flush eye with copious quantities of water.

Remove contact lenses, if present and easy to do. Continue

rinsing.

If persistent irritation occurs, obtain medical attention.

If swallowed : If swallowed, do not induce vomiting: transport to nearest

medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Rinse mouth.

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

Symptoms : Kidney toxicity may be recognized by blood in the urine or

increased or decreased urine flow. Other signs and symptoms can include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and

death.

Not considered to be an inhalation hazard under normal con-

ditions of use.

Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing,

and/or difficulty breathing.

No specific hazards under normal use conditions.

Skin irritation signs and symptoms may include a burning sen-

sation, redness, or swelling.

Eye irritation signs and symptoms may include a burning sen-

sation, redness, swelling, and/or blurred vision.

Ingestion may result in nausea, vomiting and/or diarrhoea.

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

Treatment : Call a doctor or poison control center for guidance.

Treat symptomatically.

May cause significant renal, respiratory, and CNS toxicity.

May cause significant acidosis.

The preferred treatment is immediate transportation to a medical facility and use of appropriate treatment including possible administration of activated charcoal, gastric lavage and or gastric aspiration. If none of the above are immediately available and a delay of more than one hour is anticipated before such medical attention can be obtained, induction of vomiting may be appropriate using IPECAC syrup (Contraindicated if there are any signs of CNS depression). This should be considered on a case by case basis following specialist advice.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

Specific other treatments may include ethanol therapy, fomepizole, treatment of acidosis and haemodialysis. Seek specialist advice without delay.

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam, water spray or fog. Dry chemical pow-

der, carbon dioxide, sand or earth may be used for small fires

only.

Unsuitable extinguishing

media

Do not use water in a jet.

## 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Material will not burn unless preheated.

Carbon monoxide may be evolved if incomplete combustion

occurs.

Containers exposed to intense heat from fires should be

cooled with large quantities of water.

#### 5.3 Advice for firefighters

Special protective equipment :

for firefighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to

relevant Standards (e.g. Europe: EN469).

Specific extinguishing meth-

ods

Standard procedure for chemical fires.

Further information : Evacuate the area of all non-essential personnel.

Keep adjacent containers cool by spraying with water.

## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Observe all relevant local and international regulations.

Notify authorities if any exposure to the general public or the

environment occurs or is likely to occur.

Local authorities should be advised if significant spillages

cannot be contained.

6.1.1 For non emergency personnel:

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

Avoid contact with skin, eyes and clothing.

6.1.2 For emergency responders:

Avoid contact with skin, eyes and clothing.

#### 6.2 Environmental precautions

Environmental precautions : Prevent from spreading or entering into drains, ditches or riv-

ers by using sand, earth, or other appropriate barriers.

Use appropriate containment to avoid environmental contami-

nation.

Ventilate contaminated area thoroughly.

## 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain run-off from residue flush and dispose of properly.

Soak up residue with an absorbent such as clay, sand or other

suitable material.

For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove

contaminated soil and dispose of safely.

For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely

## 6.4 Reference to other sections

For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet., For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Technical measures

Avoid breathing of or direct contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see

Section 8 of this Safety Data Sheet.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this

naterial.

Ensure that all local regulations regarding handling and storage facilities are followed.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

Advice on safe handling : Use local exhaust extraction over processing area.

Handle and open container with care in a well-ventilated area.

Do not empty into drains.

When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Handling Temperature:

Ambient.

Product Transfer : Keep containers closed when not in use. Do not pressurize

drum containers to empty.

Hygiene measures : Wash hands before eating, drinking, smoking and using the

toilet. Launder contaminated clothing before re-use.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Refer to section 15 for any additional specific legislation cov-

ering the packaging and storage of this product.

Further information on stor-

age stability

Tanks must be clean, dry and rust-free.

Keep container tightly closed.

Must be stored in a diked (bunded) well- ventilated area, away from sunlight, ignition sources and other sources of heat. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of

strict procedures and precautions.

Drums should be stacked to a maximum of 3 high.

Storage Temperature:

Ambient.

Packaging material : Suitable material: Stainless steel., Mild steel., Carbon steel

Unsuitable material: Data not available

Container Advice : Containers, even those that have been emptied, can contain

explosive vapours. Do not cut, drill, grind, weld or perform

similar operations on or near containers.

7.3 Specific end use(s)

Specific use(s) : Please refer to section 16 and/or the annexes for the regis-

tered uses under REACH.

Ensure that all local regulations regarding handling and stor-

age facilities are followed.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

**Occupational Exposure Limits** 

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 08.09.2025 800001000739 Print Date. 09.09.2025

| Components | CAS-No.        | Value type (Form of exposure)  | Control parameters  | Basis      |
|------------|----------------|--|---------------------|------------|
| ethanediol | 107-21-1       | NDS  | 15 mg/m3            | PL OEL     |
|            | Further inforr | nation: Skin   |                     |            |
| ethanediol |                | NDSch  | 50 mg/m3            | PL OEL     |
|            | Further inforr | Further information: Skin  |                     |            |
| ethanediol |                | STEL   | 40 ppm<br>104 mg/m3 | 2000/39/EC |
|            |                | Further information: Identifies the possibility of significant uptake through the skin, Indicative |                     |            |
| ethanediol |                | TWA  | 20 ppm<br>52 mg/m3  | 2000/39/EC |
|            |                | Further information: Identifies the possibility of significant uptake through the skin, Indicative |                     |            |

## **Biological occupational exposure limits**

No biological limit allocated.

## 8.2 Exposure controls

## **Engineering measures**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Eye washes and showers for emergency use.

#### **General Information**

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

## Personal protective equipment

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex. The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards.

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

Eye protection : If material is handled such that it could be splashed into eyes,

protective eyewear is recommended. Approved to EU Standard EN166.

Hand protection

Remarks : Where hand contact with the product may occur the use of

gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. Longer term protection: Nitrile rubber gloves. Incidental contact/Splash protection: PVC or neoprene rubber gloves. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Skin and body protection

Skin protection is not ordinarily required beyond standard

work clothes.

It is good practice to wear chemical resistant gloves. Protective clothing approved to EU Standard EN14605.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Where air-filtering respirators are suitable, select an appro-

priate combination of mask and filter.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

If air-filtering respirators are suitable for conditions of use: Select a filter suitable for the combination of organic gases and vapours and particles meeting EN14387 and EN143 [Filter type A/P for use against certain organic gases and vapours with a boiling point >65°C (149°F) and for use

against particles].

Thermal hazards : Not applicable

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state : Slightly viscous liquid.

Colour : colourless

Odour : mild

Odour Threshold : Data not available

Melting / freezing point : -13 °C

Boiling point/boiling range : 196 - 200 °C

Flammability

Flammability (solid, gas) : Not applicable

Lower explosion limit and upper explosion limit / flammability limit

Upper explosion limit /

Upper flammability limit

28 %(V)

Lower explosion limit /

Lower flammability limit

3,2 %(V)

Flash point : 115 °C

Method: Pensky-Martens closed cup

Auto-ignition temperature : 398 °C

Decomposition temperature

Decomposition tempera-

Data not available

ture

pH : Data not available

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

Viscosity

Viscosity, dynamic : 16,1 mPa.s (25 °C)

Method: ASTM D445

Viscosity, kinematic : 24,8 mm2/s (20 °C)

Method: ASTM D445

Solubility(ies)

Water solubility : completely soluble

Partition coefficient: n-

octanol/water

: log Pow: -1,93 (20 °C)

Vapour pressure : < 10 Pa (20 °C)

Relative density : 1,1155 (20 °C)

Method: ASTM D4052

Density : 1.113 kg/m3 (20 °C)

Method: ASTM D4052

Relative vapour density : 2,14

(Air = 1.0)

Particle characteristics

Particle size : Data not available

9.2 Other information

Explosive properties : Not applicable

Oxidizing properties : Data not available

Evaporation rate : 0,0°

Method: ASTM D 3539, nBuAc=1

Conductivity: > 10,000 pS/m

A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid, This material is not expected to be

a static accumulator.

Surface tension : Data not available

Molecular weight : 62 g/mol

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

## 10.2 Chemical stability

No hazardous reaction is expected when handled and stored according to provisions Oxidises on contact with air.

## 10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

#### 10.4 Conditions to avoid

Conditions to avoid : Extremes of temperature and direct sunlight.

Product cannot ignite due to static electricity.

## 10.5 Incompatible materials

Materials to avoid : Strong oxidising agents.

Strong acids. Strong bases.

#### 10.6 Hazardous decomposition products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

## **SECTION 11: Toxicological information**

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of:

exposure

Skin and eye contact are the primary routes of exposure although exposure may occur through inhalation or following

accidental ingestion.

## **Acute toxicity**

#### Components:

#### ethanediol:

Acute oral toxicity : LD 50 (Rat, male and female): > 2.000 mg/kg

Method: Acceptable non-standard method.

Remarks: Harmful if swallowed.

There is a marked difference in acute oral toxicity between

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 100 milliliters (1/2 cup). This material has also been shown to be toxic and potentially

lethal by ingestion to cats and dogs.

Acute inhalation toxicity : LC 50 (Rat, male and female): > 2,5 mg/l

Exposure time: 6 h Test atmosphere: Aerosol

Method: Literature data Remarks: LC50 > 1.0 - <= 5.0 mg/l

LC50 greater than near-saturated vapour concentration. Based on available data, the classification criteria are not met.

Acute dermal toxicity : LD 50 (Mouse, male and female): > 2.000 mg/kg

Method: Literature data

Remarks: Based on available data, the classification criteria

are not met.

#### Skin corrosion/irritation

## **Components:**

#### ethanediol:

Species : Rabbit

Method : Acceptable non-standard method.

Remarks : Slightly irritating to skin. Insufficient to classify.

Serious eye damage/eye irritation

#### **Components:**

#### ethanediol:

Species : Rabbit

Method : Acceptable non-standard method. Remarks : Slightly irritating to the eye.

Insufficient to classify.

#### Respiratory or skin sensitisation

#### Components:

#### ethanediol:

Species : Guinea pig Method : Literature data

Remarks : Based on available data, the classification criteria are not met.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

#### Germ cell mutagenicity

## **Components:**

ethanediol:

Genotoxicity in vitro : Method: OECD Test Guideline 471

Remarks: Based on data from similar materials

Method: Acceptable non-standard method. Remarks: Based on data from similar materials

Method: Literature data

Remarks: Based on data from similar materials

Genotoxicity in vivo : Species: Rat

Method: Literature data

Remarks: Based on available data, the classification criteria

are not met.

Germ cell mutagenicity- As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

## Carcinogenicity

## Components:

#### ethanediol:

Species : Mouse, male and female

Application Route : Oral

Method : Literature data

Remarks : Based on available data, the classification criteria are not met.

Carcinogenicity - Assess-

ment

This product does not meet the criteria for classification in

categories 1A/1B.

| Material   | GHS/CLP Carcinogenicity Classification |
|------------|--|
| ethanediol | No carcinogenicity classification.     |

## Reproductive toxicity

## **Components:**

ethanediol:

Effects on fertility : Species: Rat

Sex: male and female Application Route: Oral

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

Method: Literature data

Remarks: Based on available data, the classification criteria

are not met.

Reproductive toxicity - As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

#### STOT - single exposure

## **Components:**

## ethanediol:

Remarks : Inhalation of vapours or mists may cause irritation to the res-

piratory system.

Based on available data, the classification criteria are not met.

Ingestion may cause drowsiness and dizziness.

## STOT - repeated exposure

## **Components:**

#### ethanediol:

Exposure routes : Oral Target Organs : Kidney

Remarks : May cause damage to organs or organ systems through pro-

longed or repeated exposure.

## Repeated dose toxicity

#### Components:

# ethanediol:

Species : Rat, male Application Route : Oral

Method : Test(s) equivalent or similar to OECD Test Guideline 408

Target Organs : Kidney

## **Aspiration toxicity**

## **Components:**

#### ethanediol:

Based on available data, the classification criteria are not met.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

#### 11.2 Information on other hazards

## **Endocrine disrupting properties**

## **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### **Further information**

**Product:** 

Remarks : Unless indicated otherwise, the data presented is representa-

tive of the product as a whole, rather than for individual com-

ponent(s).

## **Components:**

ethanediol:

Remarks : Classifications by other authorities under varying regulatory

frameworks may exist.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

## Components:

#### ethanediol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 72.860 mg/l

Exposure time: 96 h

Method: Other guideline method. Remarks: Practically non toxic: LC/EC/IC50 > 100 mg/l

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202 Remarks: Practically non toxic: LC/EC/IC50 > 100 mg/l

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (algae)): 6.500 -

13.000 mg/l

Exposure time: 96 h

Method: Other guideline method.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

Remarks: Practically non toxic: LC/EC/IC50 > 100 mg/l

Toxicity to microorganisms : EC20 (Activated sludge, domestic waste): > 1.995 mg/l

Exposure time: 0,5 h

Method: Other guideline method. Remarks: Practically non toxic: LC/EC/IC50 > 100 mg/l

Toxicity to fish (Chronic tox-

icity)

NOEC: 15.380 mg/l Exposure time: 7 d

Species: Pimephales promelas (fathead minnow)

Method: Other guideline method. Remarks: NOEC/NOEL > 100 mg/l

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 8.590 mg/l Exposure time: 7 d

Species: Chironomus sp. (midge) Method: Other guideline method. Remarks: NOEC/NOEL > 100 mg/l

## 12.2 Persistence and degradability

## **Components:**

ethanediol:

Biodegradability : Biodegradation: 90 - 100 %

Exposure time: 10 d

Method: OECD Test Guideline 301A Remarks: Readily biodegradable.

## 12.3 Bioaccumulative potential

## **Components:**

ethanediol:

Bioaccumulation : Remarks: Does not have the potential to bioaccumulate significant-

ly.

## 12.4 Mobility in soil

## **Components:**

ethanediol:

Mobility : Remarks: Disperses in water., If product enters soil, one or

more constituents will be highly mobile and may contaminate

groundwater.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

#### 12.5 Results of PBT and vPvB assessment

#### **Components:**

## ethanediol:

Assessment : The substance does not fulfill all screening criteria for persis-

tence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB..

## 12.6 Endocrine disrupting properties

#### **Product:**

Assessment : The substance/mixture does not contain components considered to

have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### 12.7 Other adverse effects

## **Product:**

Additional ecological infor-

mation

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

#### Components:

#### ethanediol:

Additional ecological infor-

mation

: Does not have ozone depletion potential.

## **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

Product : Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal meth-

ods in compliance with applicable regulations.

Remove all packaging for recovery or waste disposal. Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater

contamination.

Do not dispose into the environment, in drains or in water

courses.

Waste arising from a spillage or tank cleaning should be dis-

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

posed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local regulations may be more stringent than regional or national requirements and must be complied with.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Contaminated packaging

Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

## **SECTION 14: Transport information**

14.1 UN number or ID number

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good
: Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADN : Not regulated as a dangerous good

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

: Not regulated as a dangerous good

14.5 Environmental hazards

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Special Precautions: Refer to Section 7, Handling & Storage,

for special precautions which a user needs to be aware of or

needs to comply with in connection with transport.

14.7 Maritime transport in bulk according to IMO instruments

Pollution category : Z Ship type : 3

Product name : Ethylene glycol

**Additional Information**: This product may be transported under nitrogen blanketing.

Nitrogen is an odourless and invisible gas. Exposure to nitrogen enriched atmospheres displaces available oxygen which may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a confined space

entry.

#### **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

mixtures and articles (Annex XVII)

: Not applicable

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH),

Article 57).

#### Other regulations:

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Act of 25 February 2011 on chemical substances and their mixtures (Dz.U. 2011 nr 63 poz. 322).

Ordinance of the Minister of Health of 12 January 2015 concerning the criteria and procedures for classification of chemical substances and their mixtures (Dz.U. 2015 poz. 208).

Regulation of the Minister of Labor and Social Policy of 6th June 2014 concerning the highest allowable concentrations and levels of agents harmful for health in the workplace (Dz.U. 2018 poz. 1286).

Regulations of the Minister of Economy, Labor and Social Policy of 21 December 2005 concerning the basic requirements for personal protective equipment (Dz.U. 2005 nr 259 poz. 2173).

Ordinance of the Minister of Health of 9 September 2016 on the health and safety of workers related to chemical agents at work (Dz.U. 2016 poz. 1488).

Regulation of the Minister of Health of 2nd February 2011 concerning tests and measurement of agents harmful for health in the workplace (Dz.U. 2011 nr 33 poz 166).

Regulation of the Minister of Health of 20 April 2012 on the labelling of packaging of dangerous substances and mixtures of dangerous substances and mixtures (Dz.U. 2011 nr 33 poz. 166). Act of 14 December 2012 on Waste (Dz.U. 2013 poz. 21).

Act of 13 June 2013 on packaging and packaging waste (Dz.U. 2013 poz. 888).

Regulation of the Minister of Environment of 9 December 2014 on the Waste Catalog (Dz.U. 2014 poz. 1923).

Act of 19 August 2011 on the carriage of dangerous goods (Dz.U. 2011 nr 227 poz. 1367).

## The components of this product are reported in the following inventories:

DSL : Listed

IECSC : Listed

ENCS : Listed

KECI : Listed

NZIoC : Listed

PICCS : Listed

TSCA : Listed

TCSI : Listed

## 15.2 Chemical safety assessment.

A Chemical Safety Assessment has been carried out for this substance.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

## **SECTION 16: Other information**

#### Full text of other abbreviations

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

PL OEL : Ordinance of the Minister of Family, Labour and Social Policy

of 12 June 2018 concerning the highest allowable concentrations and levels of the agents harmful for health in the work-

place (Dz.U 2018 pos 1286, with later amendments)

2000/39/EC / TWA : Limit Value - eight hours 2000/39/EC / STEL : Short term exposure limit

PL OEL / NDS : Maximal Admissible Concentration

PL OEL / NDSch : Maximal Admissible Temporary Concentration

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

**Further information** 

Training advice : Provide adequate information, instruction and training for op-

erators.

Other information : For Industry guidance and tools on REACH please visit the

CEFIC website at http://cefic.org/Industry-support.

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB.

A vertical bar (|) in the left margin indicates an amendment

from the previous version.

Sources of key data used to

compile the Safety Data

Sheet

The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU

IUCLID date base, EC 1272 regulation, etc).

Classification of the mixture: Classification procedure:

Acute Tox. 4 H302 Expert judgement and weight of evi-

dence determination.

STOT RE 2 H373 Expert judgement and weight of evi-

dence determination.

Identified Uses according to the Use Descriptor System

**Uses - Worker** 

Title : Manufacture of substance

- Industrial

Uses - Worker

Title : Water treatment chemicals

- Industrial

**Uses - Worker** 

Title : Use in laboratories

- Professional

**Uses - Worker** 

Title : Use in laboratories

- Industrial

**Uses - Worker** 

Title : Use as an intermediate

- Industrial

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

**Uses - Worker** 

Title : Distribution of substance

- Industrial

**Uses - Worker** 

Title : Formulation & (re)packing of substances and mixtures

- Industrial

**Uses - Worker** 

Title : Uses in Coatings

- Industrial

**Uses - Worker** 

Title : Uses in Coatings

- Professional

**Uses - Worker** 

Title : Use in Cleaning Agents

- Industrial

**Uses - Worker** 

Title : Use in Cleaning Agents

- Professional

**Uses - Worker** 

Title : Lubricants

- Industrial

**Uses - Worker** 

Title : Metal working fluids / rolling oils

- Industrial

**Uses - Worker** 

Title : Metal working fluids / rolling oils

- Professional

**Uses - Worker** 

Title : Use in Agrochemicals uses

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

- Professional

**Uses - Worker** 

Title : Functional Fluids

- Industrial

**Uses - Worker** 

Title : Functional Fluids

- Professional

**Uses - Worker** 

Title : De-icing and anti-icing applications

- Professional

**Uses - Worker** 

Title : Use in Oil and Gas field drilling and production operations

- Industrial

Identified Uses according to the Use Descriptor System

**Uses - Consumer** 

Title : Uses in Coatings

- Consumer

**Uses - Consumer** 

Title : Use in Cleaning Agents

- Consumer

**Uses - Consumer** 

Title : De-icing and anti-icing applications

- Consumer

**Uses - Consumer** 

Title : Other Consumer Uses

- Consumer

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

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

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.

PL / EN

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

**Exposure Scenario - Worker** 

| CECTION 4        | EVECUEE COEMADIO TITLE  |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Manufacture of substance- Industrial  |
| Use Descriptor   | Sector of Use: SU 3, SU8, SU9   |
| •                | Process Categories: PROC 1, PROC 2, PROC 3, PROC 4,   |
|                  | PROC 8a, PROC 8b, PROC 15   |
|                  | Environmental Release Categories: ERC1, ERC4  |
| Scope of process | Manufacture of the substance or use as a process chemical or extraction agent. Includes recycling/ recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities. |

| SECTION 2                         | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES            |  |
|-----------------------------------|--|--|
| Additional Information            | No exposure assessment presented for the environment.          |  |
| Section 2.1                       | Control of Worker Exposure                                     |  |
| Product Characteristics           | · · · · · · · · · · · · · · · · · · ·                          |  |
| Physical form of product          | Liquid, vapour pressure < 0.5 kPa at STP                       |  |
| Concentration of the Sub-         | Covers use of substance/product up to 100% (unless stated      |  |
| stance in Mixture/Article         | differently).,   |  |
| Frequency and Duration of         | Use  |  |
|                                   | 8 hours (unless stated differently).                           |  |
| <b>Other Operational Conditio</b> | ns affecting Exposure  |  |
| Assumes a good basic stand        | ard of occupational hygiene is implemented.                    |  |
| Assumes use at not more that      | an 20°C above ambient temperature (unless stated differently). |  |
| Contributing Scenarios            | Risk Management Measures                                       |  |
| General exposures (closed         | No specific measures identified.                               |  |
| systems)elevated tempera-         |  |  |
| tureContinuous process            |  |  |
| General exposures (closed         | Provide extraction ventilation at points where emissions oc-   |  |
| systems)General measures          | cur.   |  |
| (skin irritants).elevated         |  |  |
| temperatureContinuous             |  |  |
| process                           |  |  |
|                                   | No appoific macoures identified                                |  |
| General exposures.Use in          | No specific measures identified.                               |  |
| contained batch processes         | ·  |  |
| •                                 | No specific measures identified.                               |  |
| contained batch processes         | ·  |  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| temperature   |  |  |
|---|--|--|
| Equipment cleaning and maintenance                    | Drain down and flush system prior to equipment opening or maintenance. |  |
| Bulk transfersDedicated facility                      | Use in semi-automated and predominantly enclosed filling lines.        |  |
| Bulk product storage(closed systems)                  | No specific measures identified.                                       |  |
| Laboratory activities                                 | No specific measures identified.                                       |  |
| Section 2.2   | Control of Environmental Exposure                                      |  |
| No exposure assessment presented for the environment. |  |  |

| SECTION 3  | EXPOSURE ESTIMATION |  |
|--|---------------------|--|
| Section 3.1 - Health   |                     |  |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |                     |  |

indicated.

## Section 3.2 - Environment

No exposure assessment presented for the environment.

| SECTION 4   | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |  |  |
|---|---|--|--|
| Section 4.1 - Health  | Section 4.1 - Health                                    |  |  |
| Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management |   |  |  |
| Measures/Operational Conditions outlined in Section 2 are implemented.              |   |  |  |
| Where other Risk Management Measures/Operational Conditions are adopted, then users |   |  |  |
| should ensure that risks are managed to at least equivalent levels                  |   |  |  |

## Section 4.2 - Environment

No exposure assessment presented for the environment.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

**Exposure Scenario - Worker** 

| 30000000700      |  |
|------------------|--|
| SECTION 1        | EXPOSURE SCENARIO TITLE  |
| Title            | Water treatment chemicals- Industrial  |
| Use Descriptor   | Sector of Use: SU 3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 13 Environmental Release Categories: ERC3, ERC4 |
| Scope of process | Covers the use of the substance for the treatment of water at industrial facilities in open and closed systems.                                |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES       |  |
|---|---|--|
| Additional Information  | No exposure assessment presented for the environment.     |  |
| Section 2.1   | Control of Worker Exposure                                |  |
| Product Characteristics   |   |  |
| Physical form of product  | Liquid, vapour pressure < 0.5 kPa at STP                  |  |
| Concentration of the Sub-   | Covers use of substance/product up to 100% (unless stated |  |
| stance in Mixture/Article   | differently).,  |  |
| Frequency and Duration of Use   |   |  |
| Covers daily exposures up to 8 hours (unless stated differently).     |   |  |
| Other Operational Conditions affecting Exposure                       |   |  |
| Assumes a good basic standard of occupational hygiene is implemented. |   |  |

Assumes a good basic standard of occupational hygiene is implemented.

Assumes use at not more than 20°C above ambient temperature (unless stated differently).

| Contributing Scenarios                   | Risk Management Measures   |
|--|--|
| General exposures (closed systems)       | No specific measures identified.   |
| General exposures (open systems)         | Wear suitable gloves tested to EN374.  |
| Bulk transfersDedicated facility         | No specific measures identified.   |
| Bulk transfersNon-<br>dedicated facility | Ensure material transfers are under containment or extract ventilation.  |
| Drum/batch transfers                     | Use drum pumps or carefully pour from container. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |
| Pouring from small containers            | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Dipping, immersion and pouring                        | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
|---|---|--|
| Equipment cleaning and maintenance                    | Drain down system prior to equipment opening or maintenance.  Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |  |
| Storage.  | Store substance within a closed system.   |  |
| Section 2.2   | Control of Environmental Exposure   |  |
| No exposure assessment presented for the environment. |   |  |

| SECTION 3  | EXPOSURE ESTIMATION |
|--|---------------------|
| Section 3.1 - Health   |                     |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

## Section 3.2 - Environment

No exposure assessment presented for the environment.

| SECTION 4            | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |
|----------------------|---|
| Section 4.1 - Health |   |

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Section 4.2 -Environment

No exposure assessment presented for the environment.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

**Exposure Scenario - Worker** 

| Exposure occinano - Worker |  |
|----------------------------|--|
| 30000000699                |  |
| SECTION 1                  | EXPOSURE SCENARIO TITLE  |
| Title                      | Use in laboratories- Professional  |
| Use Descriptor             | Sector of Use: SU 22 Process Categories: PROC 15 Environmental Release Categories: ERC8a                 |
| Scope of process           | Use of small quantities within laboratory settings, including material transfers and equipment cleaning. |

| SECTION 2  | OPERATIONAL CONDITIONS AND RIS                          | K MANAGEMENT       |
|--|---|--------------------|
| Additional Information   | No exposure assessment presented for the                | he environment.    |
| Section 2.1  | Control of Worker Exposure                              |                    |
| Product Characteristics  |   |                    |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STF                |                    |
| Concentration of the Substance in Mixture/Article  | Covers use of substance/product up to 10 differently)., | 00% (unless stated |
| Frequency and Duration of  | Use   |                    |
| Covers daily exposures up to   | 8 hours (unless stated differently).                    |                    |
| Other Operational Condition  | ns affecting Exposure                                   |                    |
| Assumes a good basic stand   | ard of occupational hygiene is implemented              | d.                 |
| Assumes use at not more than 20°C above ambient temperature (unless stated differently). |   |                    |
| Contributing Scenarios   | Risk Management Measures                                |                    |
| Laboratory activitiessmall   | No specific measures identified.                        |                    |
| scale  |   |                    |
| Section 2.2  | Control of Environmental Exposure                       |                    |
| No exposure assessment pro   | esented for the environment.                            |                    |

| Section 3.1 - Health  |  |
|---|--|
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. |  |
| -   |  |

| Section 3.2 -E | nvironment                               |
|----------------|--|
| No exposure a  | ssessment presented for the environment. |
|                |  |

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|-----------|---------------------------------------|

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

## **EXPOSURE SCENARIO**

## Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Section 4.2 - Environment

No exposure assessment presented for the environment.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

**Exposure Scenario - Worker** 

| Exposure occitatio - 11 | orner   |
|-------------------------|---|
| 30000000698             |   |
| SECTION 1               | EXPOSURE SCENARIO TITLE   |
| Title                   | Use in laboratories- Industrial   |
| Use Descriptor          | Sector of Use: SU 3 Process Categories: PROC 15 Environmental Release Categories: ERC2, ERC4          |
| Scope of process        | Use of the substance within laboratory settings, including material transfers and equipment cleaning. |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES                      |
|---|--|
| Additional Information                            | No exposure assessment presented for the environment.                    |
| Section 2.1                                       | Control of Worker Exposure   |
| Product Characteristics                           |  |
| Physical form of product                          | Liquid, vapour pressure < 0.5 kPa at STP                                 |
| Concentration of the Substance in Mixture/Article | Covers use of substance/product up to 100% (unless stated differently)., |
| Frequency and Duration of                         | Use  |
| Covers daily exposures up to                      | 8 hours (unless stated differently).                                     |
| Other Operational Condition                       | ons affecting Exposure   |
| Assumes a good basic stand                        | lard of occupational hygiene is implemented.                             |
| Assumes use at not more that                      | an 20°C above ambient temperature (unless stated differently).           |
| Contributing Scenarios                            | Risk Management Measures   |
| Laboratory activitiessmall                        | No specific measures identified.   |
| scale   |  |
| Section 2.2                                       | Control of Environmental Exposure  |
| No exposure assessment pro                        | esented for the environment.   |

| SECTION 3  | EXPOSURE ESTIMATION |
|--|---------------------|
| Section 3.1 - Health   |                     |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |                     |
| indicated.   |                     |

| Section   | 3.2 -Environment |
|---|------------------|
| No exposure assessment presented for the environment. |                  |
|   |                  |

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|-----------|---------------------------------------|
|           |                                       |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

## **EXPOSURE SCENARIO**

## Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## **Section 4.2 - Environment**

No exposure assessment presented for the environment.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

**Exposure Scenario - Worker** 

| 30000000673      |  |
|------------------|--|
| SECTION 1        | EXPOSURE SCENARIO TITLE  |
| Title            | Use as an intermediate- Industrial   |
| Use Descriptor   | Sector of Use: SU 3, SU8, SU9 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 15 Environmental Release Categories: ERC6a  |
| Scope of process | Use of substance as an intermediate (not related to Strictly Controlled Conditions). Includes recycling/ recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container). |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES                      |
|--|--|
| Additional Information   | No exposure assessment presented for the environment.                    |
| Section 2.1  | Control of Worker Exposure   |
| Product Characteristics  |  |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STP                                 |
| Concentration of the Substance in Mixture/Article                                      | Covers use of substance/product up to 100% (unless stated differently)., |
| Frequency and Duration of  |  |
|  | 8 hours (unless stated differently).                                     |
| Other Operational Conditio   | ns affecting Exposure  |
| Assumes a good basic stands  | ard of occupational hygiene is implemented.                              |
| Assumes use at not more that   | in 20°C above ambient temperature (unless stated differently).           |
| Contributing Scenarios   | Risk Management Measures   |
| General exposures (closed systems)Continuous process                                   | No specific measures identified.   |
| General exposures (closed systems)General measures (skin irritants).Continuous process | No specific measures identified.   |
| General exposures.Use in contained batch processes                                     | No specific measures identified.   |
| General exposures.Batch process  | No specific measures identified.   |
| Process sampling   | Ensure dedicated sample points are provided.                             |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Equipment cleaning and maintenance                    | Drain down and flush system prior to equipment opening or maintenance.  |  |
|---|---|--|
| Bulk transfersDedicated facility                      | No specific measures identified.  |  |
| Bulk transfersNon-<br>dedicated facility              | Ensure material transfers are under containment or extract ventilation. |  |
| Bulk product storage(closed systems)                  | No specific measures identified.  |  |
| Laboratory activities                                 | No specific measures identified.  |  |
| Section 2.2   | Control of Environmental Exposure                                       |  |
| No exposure assessment presented for the environment. |   |  |

| SECTION 3   | EXPOSURE ESTIMATION |  |
|---|---------------------|--|
| Section 3.1 - Health  |                     |  |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. |                     |  |

## Section 3.2 - Environment

No exposure assessment presented for the environment.

| SECTION 4            | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |
|----------------------|---|
| Section 4.1 - Health |   |

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## Section 4.2 -Environment

No exposure assessment presented for the environment.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| 30000000672      |  |
|------------------|--|
| SECTION 1        | EXPOSURE SCENARIO TITLE  |
| Title            | Distribution of substance- Industrial  |
| Use Descriptor   | Sector of Use: SU 3, SU8, SU9 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 9, PROC 15 Environmental Release Categories: ERC1, ERC2, ERC3, ERC4, ERC5, ERC6a, ERC6b, ERC 6C, ERC 6D, ERC7             |
| Scope of process | Loading (including marine vessel/barge, rail/road car and IBC loading) and repacking (including drums and small packs) of substance, including its sampling, storage, unloading distribution and associated laboratory activities. |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES            |
|--|--|
| Additional Information   | No exposure assessment presented for the environment.          |
| Section 2.1  | Control of Worker Exposure                                     |
| Product Characteristics  |  |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STP                       |
| Concentration of the Sub-  | Covers use of substance/product up to 100% (unless stated      |
| stance in Mixture/Article  | differently).,   |
| Frequency and Duration of  |  |
|  | 8 hours (unless stated differently).                           |
| Other Operational Conditio   |  |
|  | ard of occupational hygiene is implemented.                    |
| Assumes use at not more that   | an 20°C above ambient temperature (unless stated differently). |
| Contributing Scenarios   | Risk Management Measures                                       |
| General exposures (closed systems)Continuous process                                   | No specific measures identified.                               |
| General exposures (closed systems)General measures (skin irritants).Continuous process | No specific measures identified.                               |
| General exposures.Use in contained batch processes                                     | No specific measures identified.                               |
|  | No specific measures identified.                               |
| General exposures.Batch process  | The opening medical of laterial of                             |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Equipment cleaning and maintenance                    | Drain down and flush system prior to equi maintenance.                  | ipment opening or  |
|---|---|--------------------|
| Bulk transfersDedicated facility                      | No specific measures identified.  |                    |
| Bulk transfersNon-<br>dedicated facility              | Ensure material transfers are under conta ventilation.                  | ainment or extract |
| Drum/batch transfersDedicated facility                | No specific measures identified.  |                    |
| Drum and small package filling                        | Fill containers/cans at dedicated filling po local extract ventilation. | ints supplied with |
| Bulk product storage(closed systems)                  | No specific measures identified.  |                    |
| Laboratory activities                                 | No specific measures identified.  |                    |
| Section 2.2 Control of Environmental Exposure         |   |                    |
| No exposure assessment presented for the environment. |   |                    |

|  | SECTION 3 | EXPOSURE ESTIMATION |
|--|-----------|---------------------|
| Section 3.1 - Health   |           |                     |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |           |                     |

indicated.

#### Section 3.2 - Environment

No exposure assessment presented for the environment.

| SECTION 4            | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|----------------------|---------------------------------------|
|                      | EXPOSURE SCENARIO                     |
| Section 4.1 - Health |                                       |

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

| Section 4.2 -Environment                              |  |
|---|--|
| No exposure assessment presented for the environment. |  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

| Exposure Scenario - Worker |  |
|----------------------------|--|
| 30000000674                |  |
| SECTION 1                  | EXPOSURE SCENARIO TITLE  |
| Title                      | Formulation & (re)packing of substances and mixtures- Industrial   |
| Use Descriptor             | Sector of Use: SU 3, SU 10 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 8a, PROC 8b, PROC 9, PROC 14, PROC 15 Environmental Release Categories: ERC2   |
| Scope of process           | Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tabletting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities. |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES                      |
|---|--|
| Additional Information  | No exposure assessment presented for the environment.                    |
| Section 2.1   | Control of Worker Exposure   |
| Product Characteristics   |  |
| Physical form of product  | Liquid, vapour pressure < 0.5 kPa at STP                                 |
| Concentration of the Substance in Mixture/Article   | Covers use of substance/product up to 100% (unless stated differently)., |
| Frequency and Duration of   | Use  |
| Covers daily exposures up to  | 8 hours (unless stated differently).                                     |
| <b>Other Operational Conditio</b>   | ns affecting Exposure  |
| Assumes a good basic standard of occupational hygiene is implemented. Assumes use at not more than 20°C above ambient temperature (unless stated differently) |  |
| Contributing Scenarios  | Risk Management Measures   |
| General exposures (closed systems)Continuous process  | No specific measures identified.   |
| General exposures (closed systems)General measures (skin irritants).Continuous process  | No specific measures identified.   |
| General exposures.Use in contained batch processes  | No specific measures identified.   |
| General exposures.Batch process   | No specific measures identified.   |
| Mixing operations (open   | Wear chemically resistant gloves (tested to EN374) in combi-             |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| systems)   | nation with 'basic' employee training.                                 |                    |
|--|--|--------------------|
| Production or preparation or articles by tabletting, compression, extrusion or pelletisation | No specific measures identified.                                       |                    |
| Product sampling.  | Ensure dedicated sample points are prov                                | rided.             |
| Equipment cleaning and maintenance   | Drain down and flush system prior to equipmaintenance.                 | ipment opening or  |
| Bulk transfersDedicated facility   | No specific measures identified.                                       |                    |
| Bulk transfersNon-<br>dedicated facility   | Ensure material transfers are under conta ventilation.                 | ainment or extract |
| Drum/batch transfersDedicated facility   | No specific measures identified.                                       |                    |
| Drum and small package filling   | Fill containers/cans at dedicated filling polocal extract ventilation. | ints supplied with |
| Bulk product storage(closed systems)   | No specific measures identified.                                       |                    |
| Laboratory activities  | No specific measures identified.                                       |                    |
| Section 2.2  | Control of Environmental Exposure                                      |                    |
| No exposure assessment presented for the environment.  |  |                    |

| SECTION 3  | EXPOSURE ESTIMATION |
|--|---------------------|
| Section 3.1 - Health   |                     |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

### Section 3.2 - Environment

No exposure assessment presented for the environment.

|                      | SECTION 4  | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO   |
|----------------------|--|---|
| Section 4.1 - Health |  |   |
|                      | Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. |   |
|                      |  |   |
|                      |  | nt Measures/Operational Conditions are adopted, then users nanaged to at least equivalent levels. |

### Section 4.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| 30000000675      |  |
|------------------|--|
| SECTION 1        | EXPOSURE SCENARIO TITLE  |
| Title            | Uses in Coatings- Industrial   |
| Use Descriptor   | Sector of Use: SU 3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 7, PROC 8a, PROC 8b, PROC 10, PROC 13, PROC 15 Environmental Release Categories: ERC4   |
| Scope of process | Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities. |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISK MEASURES                                 | MANAGEMENT           |
|--|--|----------------------|
| Additional Information   | No exposure assessment presented for the                                 | environment.         |
| Section 2.1  | Control of Worker Exposure   |                      |
| Product Characteristics  |  |                      |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STP                                 |                      |
| Concentration of the Substance in Mixture/Article                        | Covers use of substance/product up to 100% (unless stated differently)., |                      |
| Frequency and Duration of  |  |                      |
|  | 8 hours (unless stated differently).                                     |                      |
| Other Operational Conditio   |  |                      |
| Assumes a good basic stand   | ard of occupational hygiene is implemented.                              |                      |
| Assumes use at not more that   | an 20°C above ambient temperature (unless s                              | stated differently). |
| Contributing Scenarios   | Risk Management Measures   |                      |
| General exposures (closed systems)                                       | No specific measures identified.   |                      |
| General exposures (closed systems)with sample collection                 | No specific measures identified.   |                      |
| Film formation - force dry-<br>ing, stoving and other tech-<br>nologies. | No specific measures identified.   |                      |
| Film formation - air drying  | No specific measures identified.   |                      |
| Mixing operations (closed  | No specific measures identified.   |                      |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| systems)  |  |  |
|---|--|--|
| Mixing operations (open systems)Preparation of material for application | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| Material transfersDedicated facility                                    | No specific measures identified.   |  |
| Bulk transfersNon-<br>dedicated facility                                | Ensure material transfers are under containment or extract ventilation.  |  |
| Drum/batch transfers  | Use drum pumps or carefully pour from container.   |  |
| Spraying (automatic/robotic)  | Carry out in a vented booth or extracted enclosure. Ensure the ventilation system is regularly maintained and tested. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. |  |
| ManualSpraying  | Carry out in a vented booth or extracted enclosure. Ensure the ventilation system is regularly maintained and tested. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. |  |
| Roller, spreader, flow application                                      | Use long handled brushes and rollers where possible. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| Dipping, immersion and pouring  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| Laboratory activities   | No specific measures identified.   |  |
| Equipment cleaning and maintenance                                      | Drain down system prior to equipment opening or maintenance.   |  |
| Storage.  | Store substance within a closed system.  |  |
| Section 2.2   | Control of Environmental Exposure  |  |
| No exposure assessment pre  | esented for the environment.   |  |

| SECTION 3  | EXPOSURE ESTIMATION |
|--|---------------------|
| Section 3.1 - Health   |                     |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |                     |

indicated.

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

#### Section 3.2 - Environment

No exposure assessment presented for the environment.

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### **Section 4.2 - Environment**

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

| 30000000676      |  |
|------------------|--|
| SECTION 1        | EXPOSURE SCENARIO TITLE  |
| Title            | Uses in Coatings- Professional   |
| Use Descriptor   | Sector of Use: SU 22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 8a, PROC 8b, PROC 10, PROC 11, PROC 13, PROC 15, PROC 19 Environmental Release Categories: ERC8a, ERC8d  |
| Scope of process | Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation), and equipment cleaning, maintenance and associated laboratory activities. |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISH MEASURES                                 | <b>MANAGEMENT</b> |
|--|--|-------------------|
| Additional Information   | No exposure assessment presented for the                                 | e environment.    |
| Section 2.1  | Control of Worker Exposure   |                   |
| Product Characteristics  |  |                   |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STP                                 |                   |
| Concentration of the Substance in Mixture/Article  | Covers use of substance/product up to 100% (unless stated differently)., |                   |
| Frequency and Duration of Use  |  |                   |
| Covers daily exposures up to   | 8 hours (unless stated differently).                                     |                   |
| Other Operational Conditio   |  |                   |
| Assumes a good basic stand   | ard of occupational hygiene is implemented.                              |                   |
| Assumes use at not more than 20°C above ambient temperature (unless stated differently). |  |                   |
| Contributing Scenarios   | Risk Management Measures   |                   |
| Filling/ preparation of  | No specific measures identified.   |                   |
| equipment from drums or  |  |                   |
| containers.  |  |                   |
| General exposures (closed  | No specific measures identified.   |                   |
| systems)Use in contained   |  |                   |
| systems  |  |                   |
| Preparation of material for application  | No specific measures identified.   |                   |
| Film formation - air drying  | No specific measures identified.   |                   |
| Film formation - force dry-  | No specific measures identified.   |                   |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| ing, stoving and other tech-<br>nologies.                              |   |  |
|--|---|--|
| Material trans-<br>fersDrum/batch trans-<br>fersNon-dedicated facility | Use drum pumps or carefully pour from container.  |  |
| Material trans-<br>fersDrum/batch trans-<br>fersDedicated facility     | No specific measures identified.  |  |
| Roller, spreader, flow application                                     | Provide extraction ventilation at points where emissions occur.  Use long handled brushes and rollers where possible.  Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| ManualSpraying   | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  Wear suitable coveralls to prevent exposure to the skin.  Carry out in a vented booth or extracted enclosure.  , or:  Wear a respirator conforming to EN140 with Type A/P2 filter or better. |  |
| Dipping, immersion and pouring   | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| Hand application - finger-<br>paints, pastels, adhesives               | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| Laboratory activities  | No specific measures identified.  |  |
| Equipment cleaning and maintenance                                     | Drain down system prior to equipment opening or maintenance.  |  |
| Storage.   | Store substance within a closed system.   |  |
| Section 2.2  | Control of Environmental Exposure   |  |
| No exposure assessment pre   | esented for the environment.  |  |

| SECTION 3            | EXPOSURE ESTIMATION |
|----------------------|---------------------|
| Section 3.1 - Health |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

| Section 3.2 -Environment                              |
|---|
| No exposure assessment presented for the environment. |

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE

EXPOSURE SCENARIO

Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Section 4.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| rkei  |
|---|
|   |
|   |
| EXPOSURE SCENARIO TITLE   |
| Use in Cleaning Agents- Industrial  |
| Sector of Use: SU 3   |
| Process Categories: PROC 1, PROC 2, PROC 3, PROC 4,   |
| PROC 7, PROC 8a, PROC 8b, PROC 10, PROC 13  |
| Environmental Release Categories: ERC4  |
| Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or   |
| containers. Exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance. |
|   |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES  |
|--|--|
| Additional Information   | No exposure assessment presented for the environment.  |
| Section 2.1  | Control of Worker Exposure   |
| Product Characteristics  |  |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STP   |
| Concentration of the Substance in Mixture/Article                              | Covers use of substance/product up to 100% (unless stated differently).,                                   |
| Frequency and Duration of  | Use  |
| Covers daily exposures up to   | 8 hours (unless stated differently).   |
| Other Operational Condition  | ns affecting Exposure  |
| Assumes use at not more that   | ard of occupational hygiene is implemented. an 20°C above ambient temperature (unless stated differently). |
| Contributing Scenarios   | Risk Management Measures   |
| Bulk transfersNon-<br>dedicated facility                                       | Ensure material transfers are under containment or extract ventilation.                                    |
| Use in contained system-<br>sAutomated process with<br>(semi) closed systems.  | No specific measures identified.   |
| Drum/batch transfers   | Use drum pumps or carefully pour from container.   |
| Filling/ preparation of equipment from drums or containers. Dedicated facility | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.          |

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Section 2.2  No exposure assessment pre              | Control of Environmental Exposure   |                                    |
|--|---|------------------------------------|
| Storage.   | Store substance within a closed system.   |                                    |
| ManualCleaningSurfacesno spraying                    | Use long handled tools where possible. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |                                    |
| Cleaning with high pressure washers                  | Carry out in a vented booth or extracted of Ensure the ventilation system is regularly tested.  Wear chemically resistant gloves (tested nation with 'basic' employee training.  Wear suitable coveralls to prevent exposit | maintained and to EN374) in combi- |
| Cleaning with low-pressure washers                   | Use long handled tools where possible. Wear chemically resistant gloves (tested nation with 'basic' employee training.  | to EN374) in combi-                |
| Degreasing small objects in cleaning station         | Wear chemically resistant gloves (tested nation with 'basic' employee training.   | to EN374) in combi-                |
| Use in contained batch processesTreatment by heating | Provide extraction ventilation at points wh cur.  |                                    |

| SECTION 3            | EXPOSURE ESTIMATION |
|----------------------|---------------------|
| Section 3.1 - Health |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

#### **Section 3.2 - Environment**

No exposure assessment presented for the environment.

| SECTION 4            | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|----------------------|---------------------------------------|
|                      | EXPOSURE SCENARIO                     |
| Section 4.1 - Health |                                       |

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

### Section 4.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

| 30000000680      |   |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Use in Cleaning Agents- Professional  |
| Use Descriptor   | Sector of Use: SU 22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 10, PROC 11, PROC 13 Environmental Release Categories: ERC8a, ERC8d   |
| Scope of process | Covers the use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand). |

| SECTION 2  | OPERATIONAL CONDITIONS AND RIS                            | SK MANAGEMENT    |
|--|---|------------------|
| Additional Information   | No exposure assessment presented for                      | the environment. |
| Section 2.1  | Control of Worker Exposure                                |                  |
| Product Characteristics  |   |                  |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at ST                   | P                |
| Concentration of the Sub-  | Covers use of substance/product up to 100% (unless stated |                  |
| stance in Mixture/Article  | differently).,  |                  |
| Frequency and Duration of Use  |   |                  |
| Covers daily exposures up to 8 hours (unless stated differently).                        |   |                  |
| Other Operational Conditions affecting Exposure  |   |                  |
| Assumes a good basic standard of occupational hygiene is implemented.                    |   |                  |
| Assumes use at not more than 20°C above ambient temperature (unless stated differently). |   |                  |

| Contributing Scenarios  | Risk Management Measures  |    |
|---|---|----|
| Filling/ preparation of equipme from drums or containers.Dedicated facility                         | Wear chemically resistant gloves (tested to EN374) in conbination with 'basic' employee training. | m- |
| Use in contained systemsAuto mated process with (semi) clo systems.                                 | · ·   |    |
| Drum/batch transfers  | Use drum pumps or carefully pour from container.  |    |
| Semi Automated process. (e.g<br>Semi automatic application of<br>floor care and maintenance pructs) |   |    |
| Filling/ preparation of equipme   | nt Use drum pumps or carefully pour from container.   |    |

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| from drums or containers.Non-dedicated facility                              |   |
|--|---|
| ManualCleaningSurfacesDipping, immersion and pouring                         | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |
| Cleaning with low-pressure washers   | Use long handled tools where possible. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |
| Cleaning with high pressure washers  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  Wear suitable coveralls to prevent exposure to the skin.  Carry out in a vented booth or extracted enclosure.  , or:  Wear a respirator conforming to EN140 with Type A/P2 filter or better. |
| ManualCleaningSurfacesSpraying   | Provide extraction ventilation at points where emissions occur.  Use long handled brushes and rollers where possible.  Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |
| Ad hoc manual application via trigger sprays, dipping, etc.Rolling, Brushing | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |
| Application of cleaning products in closed systems                           | No specific measures identified.  |
| Cleaning of medical devices  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |
| Storage.   | Store substance within a closed system.   |

| Section 2.2                | Control of Environmental Exposure |  |
|----------------------------|-----------------------------------|--|
| No exposure assessment pre | sented for the environment.       |  |

| SECTION 3            | EXPOSURE ESTIMATION |
|----------------------|---------------------|
| Section 3.1 - Health |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

## Section 3.2 -Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

| 30000000682      |  |
|------------------|--|
| SECTION 1        | EXPOSURE SCENARIO TITLE  |
| Title            | Lubricants- Industrial   |
| Use Descriptor   | Sector of Use: SU 3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 7, PROC 8a, PROC 8b, PROC 9, PROC 10, PROC 13, PROC 17, PROC 18 Environmental Release Categories: ERC4, ERC7  |
| Scope of process | Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of machinery/engines and similar articles, reworking on reject articles, equipment maintenance and disposal of wastes. |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES                      |
|---|--|
| Additional Information                            | No exposure assessment presented for the environment.                    |
| Section 2.1                                       | Control of Worker Exposure   |
| Product Characteristics                           |  |
| Physical form of product                          | Liquid, vapour pressure < 0.5 kPa at STP                                 |
| Concentration of the Substance in Mixture/Article | Covers use of substance/product up to 100% (unless stated differently)., |
| Frequency and Duration of                         |  |
|   | 8 hours (unless stated differently).                                     |
| Other Operational Condition                       |  |
| Assumes a good basic stand                        | lard of occupational hygiene is implemented.                             |
| Assumes use at not more that                      | an 20°C above ambient temperature (unless stated differently).           |
| Contributing Scenarios                            | Risk Management Measures   |
| General exposures (closed systems)                | No specific measures identified.   |
| General exposures (open systems)                  | Wear suitable gloves tested to EN374.                                    |
| Bulk transfersDedicated                           | No specific measures identified.   |
| facility  | No specific measures identified.   |
|   | Ensure material transfers are under containment or extract ventilation.  |
| facility Bulk transfersNon-                       | Ensure material transfers are under containment or extract               |

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| ment  | lines.   |  |
|---|--|--|
| Operation and lubrication of high energy open equipmentwith potential for aerosol generation. | Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| ManualRolling, Brushing   | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Use long handled brushes and rollers where possible.   |  |
| Treatment by dipping and pouring  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| Spraying  | Carry out in a vented booth or extracted enclosure. Ensure the ventilation system is regularly maintained and tested. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. |  |
| Maintenance (of larger plant items) and machine set up  | No specific measures identified.   |  |
| Engine lubricant service  | Handle substance within a closed system.   |  |
| Maintenance of small items  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| Remanufacture of reject articles  | Provide extraction ventilation at points where emissions occur.  |  |
| Storage.  | Store substance within a closed system.  |  |
| Section 2.2   | Control of Environmental Exposure  |  |
| No exposure assessment presented for the environment.   |  |  |

| SECTION 3            | EXPOSURE ESTIMATION |
|----------------------|---------------------|
| Section 3.1 - Health |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

### Section 3.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

### Section 4.2 -Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

| 300000000684     | <u> </u>  |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Metal working fluids / rolling oils- Industrial   |
| Use Descriptor   | Sector of Use: SU 3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 7, PROC 8a, PROC 8b, PROC 9, PROC 10, PROC 13, PROC 17 Environmental Release Categories: ERC4  |
| Scope of process | Covers the use in formulated MWFs/rolling oils including transfer operations, rolling and annealing activities, cutting/machining activities, automated and manual application of corrosion protections (including brushing, dipping and spraying), equipment maintenance, draining and disposal of waste oils. |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES   |  |
|---|---|--|
| Additional Information  | No exposure assessment presented for the environment.   |  |
| Section 2.1   | Control of Worker Exposure  |  |
| Product Characteristics   |   |  |
| Physical form of product  | Liquid, vapour pressure < 0.5 kPa at STP  |  |
| Concentration of the Substance in Mixture/Article                 | Covers use of substance/product up to 100% (unless stated differently).,                          |  |
| Frequency and Duration of   | Use   |  |
| Covers daily exposures up to 8 hours (unless stated differently). |   |  |
| Other Operational Conditio  | ns affecting Exposure   |  |
| Assumes a good basic stand  | ard of occupational hygiene is implemented.   |  |
| Assumes use at not more that                                      | an 20°C above ambient temperature (unless stated differently).                                    |  |
| Contributing Scenarios  | Risk Management Measures  |  |
| General exposures (closed systems)                                | No specific measures identified.  |  |
| General exposures (open systems)                                  | Wear suitable gloves tested to EN374.   |  |
| Bulk transfersDedicated facility                                  | No specific measures identified.  |  |
| Bulk transfersNon-<br>dedicated facility                          | Ensure material transfers are under containment or extract ventilation.                           |  |
| Filling/ preparation of equipment from drums or                   | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| containers.                          |  |  |
|--------------------------------------|--|--|
| Product sampling.                    | Use dedicated equipment. Wear suitable gloves tested to EN374.   |  |
| Metal machining operations           | Provide extraction ventilation at points where emissions occur.  Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| Treatment by dipping and pouring     | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| Spraying                             | Carry out in a vented booth or extracted enclosure. Ensure the ventilation system is regularly maintained and tested. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. |  |
| ManualRolling, Brushing              | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  Use long handled brushes and rollers where possible.  |  |
| Automated metal roll-<br>ing/forming | Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.  |  |
| Semi-automated metal rolling/forming | Provide extraction ventilation at points where emissions occur.  Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| Equipment cleaning and maintenance   | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| Storage.                             | Store substance within a closed system.  |  |
| Section 2.2                          | Control of Environmental Exposure  |  |
| No exposure assessment pro           | esented for the environment.   |  |

|                      | T                   |
|----------------------|---------------------|
| SECTION 3            | EXPOSURE ESTIMATION |
|                      |                     |
| Section 3.1 - Health |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

### **Section 3.2 - Environment**

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

No exposure assessment presented for the environment.

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|-----------|---------------------------------------|
|           | EXPOSURE SCENARIO                     |

### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

### Section 4.2 -Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Exposure oceriario - wo | or nor   |
|-------------------------|--|
| 300000000685            |  |
| OFOTION 4               | EVENOUEE COENARIO TITLE  |
| SECTION 1               | EXPOSURE SCENARIO TITLE  |
| Title                   | Metal working fluids / rolling oils- Professional  |
| Use Descriptor          | Sector of Use: SU 22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 5,   |
|                         | PROC 8a, PROC 8b, PROC 9, PROC 10, PROC 11, PROC 13, PROC 17   |
|                         | Environmental Release Categories: ERC8a, ERC8d   |
| Scope of process        | Covers the use in formulated MWFs including transfer operations, open and contained cutting/machining activities, automated and manual application of corrosion protections, draining and working on contaminated/reject articles, and disposal of waste oils. |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES   |  |
|--|---|--|
| Additional Information   | No exposure assessment presented for the environment.   |  |
| Section 2.1  | Control of Worker Exposure  |  |
| Product Characteristics  |   |  |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STP  |  |
| Concentration of the Substance in Mixture/Article                            | Covers use of substance/product up to 100% (unless stated differently).,                                    |  |
| Frequency and Duration of  | Use   |  |
| Covers daily exposures up to 8 hours (unless stated differently).            |   |  |
| Other Operational Condition  | ons affecting Exposure  |  |
| Assumes use at not more that   | lard of occupational hygiene is implemented. an 20°C above ambient temperature (unless stated differently). |  |
| Contributing Scenarios   | Risk Management Measures  |  |
| General exposures (closed systems)   | No specific measures identified.  |  |
| Bulk transfersDedicated facility   | No specific measures identified.  |  |
| Bulk transfersNon-<br>dedicated facility                                     | Ensure material transfers are under containment or extract ventilation.                                     |  |
|  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.           |  |
| Filling/ preparation of equipment from drums or containers.Dedicated facili- | No specific measures identified.  |  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| ty   |   |  |
|--|---|--|
| Filling/ preparation of equipment from drums or containers.Non-dedicated | Ensure material transfers are under containment or extract ventilation.  Wear chemically resistant gloves (tested to EN374) in combi-   |  |
| facility   | nation with 'basic' employee training.  |  |
| Product sampling.  | Use dedicated equipment. Wear suitable gloves tested to EN374.  |  |
| Metal machining operations   | Provide extraction ventilation at points where emissions occur.   |  |
|  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| ManualRolling, Brushing  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Use long handled brushes and rollers where possible.  |  |
| Treatment by dipping and pouring   | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| Spraying   | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  Wear suitable coveralls to prevent exposure to the skin.  Carry out in a vented booth or extracted enclosure.  , or:  Wear a respirator conforming to EN140 with Type A/P2 filter or better. |  |
|  | or better.  |  |
| Equipment cleaning and maintenanceDedicated facility                     | No specific measures identified.  |  |
| Equipment cleaning and   | Provide extraction ventilation at points where emissions oc-  |  |
| maintenanceNon-dedicated facility  | cur. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |  |
| Storage.   | Store substance within a closed system.   |  |
| Section 2.2  | Control of Environmental Exposure   |  |
| No exposure assessment pre   | ·   |  |

| SECTION 3            | EXPOSURE ESTIMATION |
|----------------------|---------------------|
| Section 3.1 - Health |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

### Section 3.2 - Environment

No exposure assessment presented for the environment.

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|-----------|---------------------------------------|
|           | EXPOSURE SCENARIO                     |

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

### Section 4.2 -Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

| Exposure decriario 110 | Exposure oceriano - Worker   |  |
|------------------------|--|--|
| 30000000687            |  |  |
| SECTION 1              | EXPOSURE SCENARIO TITLE  |  |
| Title                  | Use in Agrochemicals uses- Professional  |  |
| Use Descriptor         | Sector of Use: SU 22 Process Categories: PROC 1, PROC 2, PROC 4, PROC 8a, PROC 8b, PROC 11, PROC 13 Environmental Release Categories: ERC8a, ERC8d |  |
| Scope of process       | Use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging; including equipment clean-downs and disposal.  |  |

| SECTION 2  | OPERATIONAL CONDITIONS AND RIS                         | SK MANAGEMENT      |
|--|--|--------------------|
| Additional Information   | No exposure assessment presented for t                 | the environment.   |
| Section 2.1  | Control of Worker Exposure                             |                    |
| Product Characteristics  |  |                    |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STI               | 0                  |
| Concentration of the Substance in Mixture/Article  | Covers use of substance/product up to 1 differently)., | 00% (unless stated |
| Frequency and Duration of Use  |  |                    |
| Covers daily exposures up to 8 hours (unless stated differently).                        |  |                    |
| Other Operational Conditions affecting Exposure  |  |                    |
| Assumes a good basic standard of occupational hygiene is implemented.                    |  |                    |
| Assumes use at not more than 20°C above ambient temperature (unless stated differently). |  |                    |

| Contributing Scenarios                                  | Risk Management Measures  |
|---|---|
| Transfer from/pouring from containersDedicated facility | No specific measures identified.  |
| Mixing operations (open systems)                        | Use drum pumps or carefully pour from container. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |
| Spraying/ fogging by manual application                 | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  Wear suitable coveralls to prevent exposure to the skin.  Carry out in a vented booth or extracted enclosure.  , or:  Wear a respirator conforming to EN140 with Type A/P2 filter or better. |
| Spraying/ fogging by ma-                                | Apply within a vented cab supplied with filtered air under posi-  |

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| chine application   | tive pressure and with a protection factor of >20.  |
|---|---|
| Ad hoc manual application via trigger sprays, dipping, etc. | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |
| Equipment cleaning and maintenance                          | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |
| Disposal of wastes  | Retain drain downs in sealed storage pending disposal or for subsequent recycle.                  |
| Storage.  | Store substance within a closed system.   |
| Section 2.2   | Control of Environmental Exposure   |
| No exposure assessment pre                                  | esented for the environment.  |

| SECTION 3            | EXPOSURE ESTIMATION |  |
|----------------------|---------------------|--|
| Section 3.1 - Health |                     |  |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

### Section 3.2 - Environment

No exposure assessment presented for the environment.

| EXPOSURE SCENARIO    |  |
|----------------------|--|
| Section 4.1 - Health |  |

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Exposure oceriano - Worker |   |
|----------------------------|---|
| 30000000693                |   |
| SECTION 1                  | EXPOSURE SCENARIO TITLE   |
| Title                      | Functional Fluids- Industrial   |
| Use Descriptor             | Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9 Environmental Release Categories: ERC7   |
| Scope of process           | Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in industrial equipment including maintenance and related material transfers. |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES                               |
|---|---|
| Additional Information                            | No exposure assessment presented for the environment.                             |
| Section 2.1                                       | Control of Worker Exposure  |
| Product Characteristics                           | •   |
| Physical form of product                          | Liquid, vapour pressure < 0.5 kPa at STP  |
| Concentration of the Substance in Mixture/Article | Covers percentage substance in the product up to 100%., Unless stated otherwise., |
| Frequency and Duration o                          | f Use   |
| Covers daily exposures up t                       | o 8 hours (unless stated differently).  |
| Other Operational Condition                       | ons affecting Exposure  |
| Assumes a good basic stand                        | dard of occupational hygiene is implemented.                                      |
| Assumes use at not more th                        | an 20°C above ambient temperature (unless stated differently).                    |
| Contributing Scenarios                            | Risk Management Measures  |
| D = ' C = ' -                                     | A1 10 11 110 1  |

| Contributing Scenarios                   | Risk Management Measures  |
|--|---|
| Bulk transfersDedicated                  | No specific measures identified.  |
| facility                                 |   |
| Bulk transfersNon-<br>dedicated facility | Ensure material transfers are under containment or extract ventilation.                           |
| ,  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |
| Filling of articles/equipment            | Fill containers/cans at dedicated filling points supplied with local extract ventilation.         |
|  | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |
| Filling/ preparation of                  | Use dedicated equipment.  |
| equipment from drums or                  | Wear chemically resistant gloves (tested to EN374) in combi-                                      |
| containers.                              | nation with 'basic' employee training.  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| r   |  |
|---|--|
| General exposures.(closed systems)                    | No specific measures identified.   |
| General exposures.(open systems)                      | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  |
| Equipment maintenance                                 | Drain down system prior to equipment opening or maintenance. Wear suitable gloves tested to EN374. |
| Remanufacture of reject articles                      | Drain down system prior to equipment opening or maintenance. Wear suitable gloves tested to EN374. |
| Storage.  | Store substance within a closed system.  |
| Section 2.2   | Control of Environmental Exposure  |
| No exposure assessment presented for the environment. |  |

| SECTION 3  | EXPOSURE ESTIMATION |  |
|--|---------------------|--|
| Section 3.1 - Health   |                     |  |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |                     |  |

indicated.

#### **Section 3.2 - Environment**

No exposure assessment presented for the environment.

| SECTION 4   | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |
|---|---|
| Section 4.1 - Health  |   |
| Predicted exposures are not expected to exceed the DN(M)FL when the Risk Management |   |

Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

| Section 4.2 -Environment                              |  |
|---|--|
| No exposure assessment presented for the environment. |  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Exposure occurre worker |   |
|-------------------------|---|
| 30000000695             |   |
| SECTION 1               | EXPOSURE SCENARIO TITLE   |
| Title                   | Functional Fluids- Professional   |
| Use Descriptor          | Sector of Use: SU22 Process Categories: PROC1, PROC2, PROC3, PROC8a, PROC9, PROC20 Environmental Release Categories: ERC9a, ERC9b   |
| Scope of process        | Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in professional equipment including maintenance and related material transfers. |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES  |  |
|--|--|--|
| Additional Information   | No exposure assessment presented for the environment.  |  |
| Section 2.1  | Control of Worker Exposure   |  |
| Product Characteristics  |  |  |
| Physical form of product   | Liquid, vapour pressure < 0.5 kPa at STP   |  |
| Concentration of the Substance in Mixture/Article  | Covers percentage substance in the product up to 100%., Unless stated otherwise.,  |  |
| Frequency and Duration of  | Use  |  |
|  | 8 hours (unless stated differently).   |  |
| Other Operational Conditio   | ns affecting Exposure  |  |
| Assumes a good basic standa  | ard of occupational hygiene is implemented.  |  |
| Assumes use at not more than 20°C above ambient temperature (unless stated differently). |  |  |
| Contributing Scenarios   | Risk Management Measures   |  |
| Drum/batch transfers   | Use drum pumps or carefully pour from container. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |  |
| Transfer from/pouring from containers  | Use drum pumps or carefully pour from container. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |  |
| Filling/ preparation of equipment from drums or containers.                              | Use drum pumps or carefully pour from container. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |  |
| General exposures.(closed systems)   | No specific measures identified.   |  |
| Remanufacture of reject  | Drain down system prior to equipment opening or mainte-  |  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| articles  | nance. Wear suitable gloves tested to EN374.   |
|---|--|
| Equipment maintenance                                 | Drain down system prior to equipment opening or maintenance. Wear suitable gloves tested to EN374. |
| Storage.  | Store substance within a closed system.  |
| Section 2.2   | Control of Environmental Exposure  |
| No exposure assessment presented for the environment. |  |

| SECTION 3  | EXPOSURE ESTIMATION |  |
|--|---------------------|--|
| Section 3.1 - Health   |                     |  |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |                     |  |
| indicated.   |                     |  |

## Section 3.2 -Environment

No exposure assessment presented for the environment.

| SECTION 4          | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |
|--------------------|---|
| Section 4.1 Health |   |

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

### Section 4.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| 30000000696      |  |
|------------------|--|
| SECTION 1        | EXPOSURE SCENARIO TITLE  |
| Title            | De-icing and anti-icing applications- Professional   |
| Use Descriptor   | Sector of Use: SU22 Process Categories: PROC1, PROC2, PROC8a, PROC8b, PROC11 Environmental Release Categories: ERC8d |
| Scope of process | Ice prevention and de-icing of vehicles, aircraft and other equipment by spraying.                                   |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES  |  |
|---|--|--|
| Additional Information                                      | No exposure assessment presented for the environment.  |  |
| Section 2.1   | Control of Worker Exposure   |  |
| Product Characteristics                                     |  |  |
| Physical form of product                                    | Liquid, vapour pressure < 0.5 kPa at STP   |  |
| Concentration of the Sub-                                   | Covers percentage substance in the product up to 100%.,  |  |
| stance in Mixture/Article                                   | Unless stated otherwise.,  |  |
| Frequency and Duration of                                   |  |  |
|   | 8 hours (unless stated differently).   |  |
| Other Operational Condition                                 |  |  |
| Contributing Scenarios                                      | an 20°C above ambient temperature (unless stated differently).  Risk Management Measures   |  |
| Bulk open unloading.  | Use dedicated equipment.   |  |
|   | , or: Ensure material transfers are under containment or extract ventilation.  |  |
| Filling/ preparation of equipment from drums or containers. | Use drum pumps or carefully pour from container. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |  |
| General exposures.(closed systems)                          | No specific measures identified.   |  |
| Material transferselevated temperature                      | Use dedicated equipment. , or: Ensure material transfers are under containment or extract  |  |
|   | Ensure material transfers are under containment of extract   |  |

According to EC No 1907/2006 as amended as at the date of this SDS

## **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Spraying/ fogging by machine applicationelevated temperature | Apply within a vented cab supplied with filtered air under positive pressure and with a protection factor of >20.   |  |
|--|---|--|
| Spraying/ fogging by man-<br>ual application                 | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.  Wear suitable coveralls to prevent exposure to the skin.  Carry out in a vented booth or extracted enclosure.  , or:  Wear a respirator conforming to EN140 with Type A/P2 filter or better. |  |
| Equipment maintenance  | Drain down system prior to equipment opening or maintenance. Wear suitable gloves tested to EN374.  |  |
| Storage.   | Store substance within a closed system.   |  |
| Section 2.2  | Control of Environmental Exposure   |  |
|  | Control of Environmental Exposure esented for the environment.  |  |

| SECTION 3            | EXPOSURE ESTIMATION |
|----------------------|---------------------|
| Section 3.1 - Health |                     |

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

For some of the Contributing Scenarios workplace exposures have been estimated from measured data.

#### **Section 3.2 - Environment**

No exposure assessment presented for the environment.

| SECTION 4            | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |
|----------------------|---|
| Section 4.1 - Health |   |

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

|                  | Exposure Scenario - Worker  |  |
|------------------|---|--|
| 30000000981      |   |  |
|                  |   |  |
| SECTION 1        | EXPOSURE SCENARIO TITLE   |  |
| Title            | Use in Oil and Gas field drilling and production operations-<br>Industrial  |  |
| Use Descriptor   | Sector of Use: SU 3   |  |
|                  | Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b  |  |
|                  | Environmental Release Categories: ERC4  |  |
| Scope of process | Oil field well drilling and production operations (including drilling muds and well cleaning) including material transfers, onsite formulation, well head operations, shaker room activities and related maintenance. |  |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES  |  |
|---|--|--|
| Additional Information                            | No exposure assessment presented for the environment.  |  |
| Section 2.1                                       | Control of Worker Exposure   |  |
| Product Characteristics                           |  |  |
| Physical form of product                          | Liquid, vapour pressure < 0.5 kPa at STP   |  |
| Concentration of the Substance in Mixture/Article | Covers use of substance/product up to 100% (unless stated differently).,   |  |
| Frequency and Duration of                         |  |  |
| Covers daily exposures up to                      | osures up to 8 hours (unless stated differently).  |  |
| Other Operational Conditio                        | ns affecting Exposure  |  |
| Assumes a good basic stand                        | ard of occupational hygiene is implemented.  |  |
| Assumes use at not more that                      | an 20°C above ambient temperature (unless stated differently).   |  |
| Contributing Scenarios                            | Risk Management Measures   |  |
| General measures (skin irritants).                | Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent / minimise exposures and to report any skin problems that may develop. |  |
| General measures (eye irritants).                 | Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.   |  |
| Bulk transfers from tote                          | No specific measures identified.   |  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| tanks and supply vessels                                    |   |  |
|---|---|--|
| Filling/ preparation of equipment from drums or containers. | Use drum pumps or carefully pour from container. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.              |  |
| Drilling mud (re-)formulation                               | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| Drill floor operations                                      | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| Operation of solids filtering equipmentelevated temperature | Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.   |  |
| Cleaning of solids filtering equipment                      | Wear suitable gloves tested to EN374. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).                               |  |
| Treatment and disposal of filtered solids                   | Wear suitable gloves tested to EN374. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).                               |  |
| Process sampling  | Wear suitable gloves tested to EN374.   |  |
| General exposures (closed systems)                          | No specific measures identified.  |  |
| Pouring from small containers                               | Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.   |  |
| General exposures (open systems)                            | Wear suitable gloves tested to EN374.   |  |
| Equipment cleaning and maintenance                          | Drain down system prior to equipment opening or maintenance.  Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. |  |
| Storage.  | Store substance within a closed system.   |  |
| Section 2.2   | Control of Environmental Exposure   |  |
| No exposure assessment pre                                  | sented for the environment.   |  |

| SECTION 3                             | EXPOSURE ESTIMATION   |  |
|---------------------------------------|---|--|
| Section 3.1 - Health                  |   |  |
| The ECETOC TRA tool has be indicated. | The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. |  |

### Section 3.2 -Environment

According to EC No 1907/2006 as amended as at the date of this SDS

### **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

No exposure assessment presented for the environment.

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|-----------|---------------------------------------|
|           | EXPOSURE SCENARIO                     |

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 -Environment

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| Exposure ocenano - consumer |   |
|-----------------------------|---|
| 30000001094                 |   |
| SECTION 1                   | EXPOSURE SCENARIO TITLE   |
| Title                       | Uses in Coatings - Consumer   |
| Use Descriptor              | Sector of Use: SU 21 Product Categories: PC1, PC9a, PC15, PC18, PC31, PC32 Environmental Release Categories: ERC8a, ERC8d   |
| Scope of process            | Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning. |

| SECTION 2  | OPERATIONAL CONDITIONS AND F                        | RISK MANAGEMENT     |
|--|---|---------------------|
| Additional Information   | No exposure assessment presented for                | or the environment. |
| Section 2.1  | Control of Consumer Exposure                        |                     |
| Product Characteristics  |   |                     |
| Physical form of product   | Liquid, vapour pressure > 10 Pa                     |                     |
| Concentration of the Substance in Mixture/Article                              | Unless stated otherwise.                            |                     |
|  | Covers concentration up to (%): 5 %                 |                     |
| Amounts Used   |   |                     |
| Unless stated otherwise.   |   |                     |
| for each use event, covers ar  | mount up to (g):                                    | 9.000               |
| Frequency and Duration of  | Use   | _                   |
| Unless stated otherwise.   |   |                     |
| Covers use up to (days/year):  |   | 365                 |
| covers use up to (times/day of use):   |   | 1                   |
| Exposure (hours/event):  |   | 10                  |
| Product Categories   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES |                     |
| Adhesives, sealants Glues DIY-use (carpet glue, tile glue, wood parquet glue). | Covers concentrations up to 0,1 %                   |                     |
|  | For each use event, covers amount up to 9.000 g     |                     |
|  | covers use up to 0,25 day/year                      |                     |
|  | Covers use up to 1 times/day of use                 |                     |
|  | Covers exposure up to 1,25 hours/even               |                     |
|  | covers skin contact area up to (cm2): 110 cm2       |                     |
|  | Covers use in room size of 58 m3                    |                     |
|  | Covers use under typical household ventilation.     |                     |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

|  | Covers was at ambient temperatures   |
|--|--|
| Ocadica and acida di i   | Covers use at ambient temperatures.  |
| Coatings and paints, thin-<br>ners, paint removers Wa-<br>terborne latex wall paint.                               | Covers concentrations up to 5 %  |
| torsome rates, train paints  | For each use event, covers amount up to 1.250 g  |
|  | covers use up to 1 day/year  |
|  | Covers use up to 1 times/day of use  |
|  | Covers exposure up to 2,20 hours/event   |
|  | covers skin contact area up to (cm2): 1.900 cm2  |
|  | Covers use in room size of 20 m3   |
|  | Covers use under typical household ventilation.  |
|  | Covers use at ambient temperatures.  |
| Coatings and paints, thin-   | Covers concentrations up to 5 %  |
| ners, paint removers Solvent rich, high solid, water borne paint.  | Covers concentrations up to 3 %  |
| •  | For each use event, covers amount up to 1.250 g  |
|  | covers use up to 1 day/year  |
|  | Covers use up to 1 times/day of use  |
|  | Covers exposure up to 2,20 hours/event   |
|  | covers skin contact area up to (cm2): 1.900 cm2  |
|  | Covers use in room size of 20 m3   |
|  | Covers use under typical household ventilation.  |
|  | Covers use at ambient temperatures.  |
| Coatings and paints, thin-<br>ners, paint removers Aero-<br>sol spray can.   | Covers concentrations up to 5 %  |
|  | For each use event, covers amount up to 1.250 g  |
|  | covers use up to 2 day/year  |
|  | Covers use up to 1 times/day of use  |
|  | Covers exposure up to 0,25 hours/event   |
|  | covers skin contact area up to (cm2): 1.900 cm2  |
|  | Covers use in a one car garage (34 m3) under typical ventila-  |
|  | tion.  |
|  | Covers use at ambient temperatures.  |
| Coatings and paints, thin-<br>ners, paint removers Re-<br>movers (paint-, glue-, wall<br>paper-, sealant-remover). | Covers concentrations up to 5 %  |
|  | For each use event, covers amount up to 1.250 g  |
|  | covers use up to 1 day/year  |
|  | Covers use up to 1 times/day of use  |
|  | Covers exposure up to 2,20 hours/event   |
|  | covers skin contact area up to (cm2): 1.900 cm2  |
|  | Covers use in room size of 20 m3   |
|  | Covers use under typical household ventilation.  |
|  | Covers use at ambient temperatures.  |
| Non-metal-surface treat-   | Covers concentrations up to 5 %  |
|  | The state of the s |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| ment products Waterborne  |   |
|---|---|
| latex wall paint.   |   |
|   | For each use event, covers amount up to 1.250 g                   |
|   | covers use up to 1 day/year                                       |
|   | Covers use up to 1 times/day of use                               |
|   | Covers exposure up to 2,20 hours/event                            |
|   | covers skin contact area up to (cm2): 1.900 cm2                   |
|   | Covers use in room size of 20 m3                                  |
|   | Covers use under typical household ventilation.                   |
|   | Covers use at ambient temperatures.                               |
| Non-metal-surface treat-<br>ment products Solvent rich,<br>high solid, water borne<br>paint.            | Covers concentrations up to 5 %                                   |
|   | For each use event, covers amount up to 1.250 g                   |
|   | covers use up to 1 day/year                                       |
|   | Covers use up to 1 times/day of use                               |
|   | Covers exposure up to 2,20 hours/event                            |
|   | covers skin contact area up to (cm2): 1.900 cm2                   |
|   | Covers use in room size of 20 m3                                  |
|   | Covers use under typical household ventilation.                   |
|   | Covers use at ambient temperatures.                               |
| Non-metal-surface treat-<br>ment products Aerosol<br>spray can.   | Covers concentrations up to 5 %                                   |
|   | For each use event, covers amount up to 1.250 g                   |
|   | covers use up to 2 day/year                                       |
|   | Covers use up to 1 times/day of use                               |
|   | Covers exposure up to 0,25 hours/event                            |
|   | covers skin contact area up to (cm2): 1.900 cm2                   |
|   | Covers use in a one car garage (34 m3) under typical ventilation. |
|   | Covers use at ambient temperatures.                               |
| Non-metal-surface treat-<br>ment products Removers<br>(paint-, glue-, wall paper-,<br>sealant-remover). | Covers concentrations up to 5 %                                   |
| - /   | For each use event, covers amount up to 1.250 g                   |
|   | covers use up to 1 day/year                                       |
|   | Covers use up to 1 times/day of use                               |
|   | Covers exposure up to 2,20 hours/event                            |
|   | covers skin contact area up to (cm2): 1.900 cm2                   |
|   | Covers use in room size of 20 m3                                  |
|   | Covers use under typical household ventilation.                   |
|   | Covers use at ambient temperatures.                               |
| Ink and toners  | Covers concentrations up to 5 %                                   |
| iiii ana tonois   | For each use event, covers amount up to 50 g                      |
|   | covers use up to 365 day/year                                     |
|   | Loovers use up to soo day/year                                    |

According to EC No 1907/2006 as amended as at the date of this SDS

### **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

|  | Covers use up to 1 times/day of use             |
|--|---|
|  | Covers exposure up to 10 hours/event            |
|  | covers skin contact area up to (cm2): 215 cm2   |
|  | Covers use in room size of 25 m3                |
|  | Covers use under typical household ventilation. |
|  | Covers use at ambient temperatures.             |
| Polishes and wax blends<br>Polishes, wax / cream<br>(floor, furniture, shoes). | Covers concentrations up to 2,5 %               |
|  | For each use event, covers amount up to 550 g   |
|  | covers use up to 1 day/year                     |
|  | Covers use up to 1 times/day of use             |
|  | Covers exposure up to 4 hours/event             |
|  | covers skin contact area up to (cm2): 430 cm2   |
|  | Covers use in room size of 58 m3                |
|  | Covers use under typical household ventilation. |
|  | Covers use at ambient temperatures.             |
| Polymer preparations and compounds   | Covers concentrations up to 5 %                 |
|  | For each use event, covers amount up to 825 g   |
|  | covers use up to 0,2 day/year                   |
|  | covers use up to 1 times/day of use             |
|  | Covers exposure up to 0,5 hours/event           |
|  | covers skin contact area up to (cm2): 1.900 cm2 |
|  | Covers use in room size of 58 m3                |
|  | Covers use under typical household ventilation. |
|  | Covers use at ambient temperatures.             |
|  |   |

| Section 2.2   | Control of Environmental Exposure |  |
|---|-----------------------------------|--|
| No exposure assessment presented for the environment. |                                   |  |

| SECTION 3  | EXPOSURE ESTIMATION |  |
|--|---------------------|--|
| Section 3.1 - Health   |                     |  |
| The Consexpo model has been used to estimate consumer exposures unless otherwise |                     |  |

The Consexpo model has been used to estimate consumer exposures unless otherwise indicated.

# Section 3.2 - Environment No exposure assessment presented for the environment.

| OFOTION 4 | OUIDANIOE TO OUEOU COMPLIANIOE WITH THE |
|-----------|---|
|           |   |
|           |   |
|           |   |
|           |   |
| ·         |   |
|           |   |

| SECTION 4   | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |  |
|---|---|--|
| Section 4.1 - Health  |   |  |
| Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management |   |  |
| Measures/Operational Conditions outlined in Section 2 are implemented.              |   |  |

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

According to EC No 1907/2006 as amended as at the date of this SDS

### **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

#### Section 4.2 -Environment

According to EC No 1907/2006 as amended as at the date of this SDS

### **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| 30000001095      |   |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Use in Cleaning Agents - Consumer   |
| Use Descriptor   | Sector of Use: SU 21 Product Categories: PC35 Environmental Release Categories: ERC8a, ERC8d  |
| Scope of process | Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products. |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES   |
|--|---|
| Additional Information   | No exposure assessment presented for the environment. |
| Section 2.1  | Control of Consumer Exposure                          |
| Product Characteristics  |   |
| Physical form of product   | Liquid, vapour pressure > 10 Pa                       |
| Product Categories   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES   |
| Washing and cleaning products (including solvent based products) Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners). | Covers concentrations up to 20 %                      |
|  | For each use event, covers amount up to 500 g         |
|  | covers use up to 104 day/year                         |
|  | Covers use up to 1 times/day of use                   |
|  | Covers exposure up to 0,01 hours/event                |
|  | covers skin contact area up to (cm2): 215 cm2         |
|  | Covers use in room size of 1 m3                       |
|  | Covers use under typical household ventilation.       |
|  | Covers use at ambient temperatures.                   |
| Washing and cleaning products (including solvent based products) Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners,                                   | Covers concentrations up to 4 %                       |

According to EC No 1907/2006 as amended as at the date of this SDS

### **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| carpet cleaners, metal   |   |
|--|---|
| cleaners).   |   |
| ,  | For each use event, covers amount up to 400 g   |
|  | covers use up to 104 day/year                   |
|  | Covers use up to 1 times/day of use             |
|  | Covers exposure up to 4 hours/event             |
|  | covers skin contact area up to (cm2): 215 cm2   |
|  | Covers use in room size of 58 m3                |
|  | Covers use under typical household ventilation. |
|  | Covers use at ambient temperatures.             |
| Washing and cleaning products (including solvent based products) Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners). | Covers concentrations up to 5 %                 |
|  | For each use event, covers amount up to 19 g    |
|  | covers use up to 365 day/year                   |
|  | Covers use up to 1 times/day of use             |
|  | Covers exposure up to 1 hours/event             |
|  | covers skin contact area up to (cm2): 1.900 cm2 |
|  | Covers use in room size of 15 m3                |
|  | Covers use under typical household ventilation. |
|  | Covers use at ambient temperatures.             |

| Section 2.2   | Control of Environmental Exposure |  |
|---|-----------------------------------|--|
| No exposure assessment presented for the environment. |                                   |  |

| SECTION 3   | EXPOSURE ESTIMATION |  |
|---|---------------------|--|
| Section 3.1 - Health  |                     |  |
| The Consexpo model has been used to estimate consumer exposures unless otherwise indicated. |                     |  |

#### **Section 3.2 - Environment**

No exposure assessment presented for the environment.

| SECTION 4   | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |
|---|---|
| Section 4.1 - Health  |   |
| Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management |   |
| Measures/Operational Conditions outlined in Section 2 are implemented.              |   |
| Where other Diek Management Managers (Operational Conditions are adopted than years |   |

Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### **Section 4.2 - Environment**

According to EC No 1907/2006 as amended as at the date of this SDS

### **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

|                  | Exposure occidence                                      |  |
|------------------|---|--|
| 300000001096     |   |  |
|                  |   |  |
| SECTION 1        | EXPOSURE SCENARIO TITLE                                 |  |
| Title            | De-icing and anti-icing applications - Consumer         |  |
| Use Descriptor   | Sector of Use: SU21                                     |  |
| -                | Product Categories: PC4                                 |  |
|                  | Environmental Release Categories: ERC8d                 |  |
|                  |   |  |
| Scope of process | De-icing of vehicles and similar equipment by spraying. |  |
|                  |   |  |

| SECTION 2  | OPERATIONAL CONDITIONS AND RIS  | SK MANAGEMENT   |
|--|---|-----------------|
| Additional Information                                   | No exposure assessment presented for t  | he environment. |
| Section 2.1  | Control of Consumer Exposure  |                 |
| Product Characteristics                                  |   |                 |
| Physical form of product                                 | Liquid, vapour pressure > 10 Pa at STP  |                 |
| Concentration of the Substance in Mixture/Article        | Covers concentration up to (%): 100 %   |                 |
| Amounts Used   |   |                 |
| for each use event, covers ar                            | mount up to (g):  | 5.000           |
| Frequency and Duration of                                |   |                 |
| Covers use up to (days/year)                             |   | 365             |
| Covers exposure up to (hours                             |   | 4               |
| Product Categories                                       | OPERATIONAL CONDITIONS AND RIS  | SK MANAGEMENT   |
| Anti-Freeze and de-icing products Washing car window.    | Covers concentrations up to 100 %   |                 |
|  | For each use event, covers amount up to   | 33 g            |
|  | covers use up to 365 day/year   |                 |
|  | Covers use up to 1 times/day of use   |                 |
|  | Covers exposure up to 4 hours/event   |                 |
|  | covers skin contact area up to (cm2): 21  | 5 cm2           |
|  | Covers use in room size of 58 m3  |                 |
|  |   |                 |
|  | Covers use under typical household ven  | tilation.       |
|  | Covers use under typical household ven Covers use at ambient temperatures.  | tilation.       |
| Anti-Freeze and de-icing products Pouring into radiator. | Covers use under typical household ven  | tilation.       |
| products Pouring into radia-                             | Covers use under typical household ven Covers use at ambient temperatures.  |                 |
| products Pouring into radia-                             | Covers use under typical household ven<br>Covers use at ambient temperatures.<br>Covers concentrations up to 30 % |                 |

According to EC No 1907/2006 as amended as at the date of this SDS

### **Ethylene Glycol Fiber Grade**

VersionRevision Date.:SDS Number:Date of last issue: -1.008.09.2025800001000739Print Date. 09.09.2025

| Covers exposure up to 0,25 hours/event                            |
|---|
| covers skin contact area up to (cm2): 960 cm2                     |
| Covers use in a one car garage (34 m3) under typical ventilation. |
| Covers use at ambient temperatures.                               |

| Section 2.2   | Control of Environmental Exposure |  |
|---|-----------------------------------|--|
| No exposure assessment presented for the environment. |                                   |  |

| SECTION 3                            | EXPOSURE ESTIMATION                                     |
|--------------------------------------|---|
| Section 3.1 - Health                 |   |
| The Consexpo model has be indicated. | en used to estimate consumer exposures unless otherwise |

#### **Section 3.2 - Environment**

No exposure assessment presented for the environment.

| SECTION 4            | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|----------------------|---------------------------------------|
|                      | EXPOSURE SCENARIO                     |
| Section 4.1 - Health |                                       |

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 - Environment

According to EC No 1907/2006 as amended as at the date of this SDS

### **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025

| 30000001097      |   |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Other Consumer Uses - Consumer  |
| Use Descriptor   | Sector of Use: SU 21 Product Categories: PC28, PC39 Environmental Release Categories: ERC8a, ERC8d  |
| Scope of process | Consumer uses e.g. as a carrier in cosmetics/personal care products, perfumes and fragrances. Note: For cosmetic and personal care products, risk assessment only required for the environment under REACH as human health is covered by alternative legislation. |

| SECTION 2               | OPERATIONAL CONDITIONS AND RISK MANAGEMENT            |  |
|-------------------------|---|--|
|                         | MEASURES  |  |
| Additional Information  | No exposure assessment presented for human health.    |  |
|                         | No exposure assessment presented for the environment. |  |
| Section 2.1             | Control of Consumer Exposure                          |  |
| Product Characteristics |   |  |
| Product Categories      | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES   |  |

| Section 2.2   | Control of Environmental Exposure |  |
|---|-----------------------------------|--|
| No exposure assessment presented for the environment. |                                   |  |

| SECTION 3                  | EXPOSURE ESTIMATION       |
|----------------------------|---------------------------|
| Section 3.1 - Health       |                           |
| No exposure assessment pre | esented for human health. |

| Section 3.2 -Environment                   |              |
|--|--------------|
| No exposure assessment presented for the e | environment. |

| SECTION 4  | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |  |
|--|---|--|
| Section 4.1 - Health                               |   |  |
| No exposure assessment presented for human health. |   |  |

| Section 4.2 -Environment                              |  |
|---|--|
| No exposure assessment presented for the environment. |  |

According to EC No 1907/2006 as amended as at the date of this SDS

# **Ethylene Glycol Fiber Grade**

Version Revision Date.: SDS Number: Date of last issue: - 1.0 08.09.2025 800001000739 Print Date. 09.09.2025