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

1.1 Product identifier
   Trade name: euxyl® PE 9010

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Use of the Substance/Mixture: Preservative for cosmetics & toiletries

1.3 Details of the supplier of the safety data sheet
   Manufacturer/Supplier: Schülke & Mayr GmbH
   Robert-Koch-Str. 2
   22851 Norderstedt
   Germany
   Telephone: +49 (0)40/ 52100
   Telefax: +49 (0)40/ 52100318
   mail@schuelke.com
   www.schuelke.com
   E-mail address of person responsible for the SDS/Contact person: SAI/AT +49 40 52100 100 or S&M UK +44 114 254 3500

1.4 Emergency telephone number
   Emergency telephone number: UK Poisons Emergency number: 0870 600 6266
   Emergency telephone number: +49 (0)40 / 52 100 –0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Serious eye damage, Category 1
   H318: Causes serious eye damage.

2.2 Label elements
   Labelling (REGULATION (EC) No 1272/2008)
   Hazard pictograms:
   
   Signal word: Danger
   Hazard statements: H318 Causes serious eye damage.
   Precautionary statements:
   P280 Wear eye protection/ face protection.
   P305 + P351 + P338 IF IN EYES: Rinse cautiously with wa-
Hazardous components which must be listed on the label:
70445-33-9 3-(2-ethylhexyloxy)propane-1,2-diol

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Chemical nature: solution

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-phenoxyethanol</td>
<td>122-99-6</td>
<td>204-589-7</td>
<td>603-098-00-9</td>
<td>Acute Tox. 4; H302 Eye Irrit. 2; H319</td>
<td>88.5 - 91.5</td>
</tr>
<tr>
<td>3-(2-ethylhexyloxy)propane-1,2-diol</td>
<td>70445-33-9</td>
<td>408-080-2</td>
<td>603-168-00-9</td>
<td>Eye Dam. 1; H318 Acute Tox. 4; H332 Aquatic Chronic 3; H412</td>
<td>8.5 - 11.5</td>
</tr>
</tbody>
</table>

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General advice: Take off all contaminated clothing immediately.

If inhaled: If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with plenty of water.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Risk of serious damage to eyes.

Risks: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water, Dry powder, Foam, Carbon dioxide (CO2).

Unsuitable extinguishing media: No information available.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: No information available.

5.3 Advice for firefighters

Further information: Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections

see Section 8 + 13
SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling: Handle and open container with care.
Advice on protection against fire and explosion: No special protective measures against fire required.
Hygiene measures: Take off all contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers: Store in original container.
Further information on storage conditions: Keep away from direct sunlight. Limited stability - see label on pack. Keep container tightly closed.
Advice on common storage: Keep away from food and drink.

7.3 Specific end use(s)
Specific use(s): none

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-phenoxyethanol</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects, Long-term local effects</td>
<td>8,07 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>34,72 mg/kg</td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>Long-term exposure, Short-term exposure, Local effects</td>
<td>2,5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long-term local effects</td>
<td>20,83 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Ingestion</td>
<td>Short-term exposure, Long-term exposure, Systemic effects</td>
<td>17,43 mg/kg</td>
<td></td>
</tr>
<tr>
<td>3-(2-ethylhexyloxy)propane-1,2-diol</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Acute systemic effects</td>
<td>1,55 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Long-term systemic effects</td>
<td>0,875 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>1 mg/kg</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

euxyl® PE 9010  No Change Service!

Version  05.01  Revision Date:  04.02.2019
Date of last issue:  22.03.2016
Date of first issue:  10.11.2003

<table>
<thead>
<tr>
<th>Consumers</th>
<th>Inhalation</th>
<th>Long-term systemic effects</th>
<th>0,109 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>0,5 mg/kg</td>
</tr>
</tbody>
</table>

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-phenoxethanol</td>
<td>Fresh water</td>
<td>0,943 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0,0943 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>7,2366 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>0,7237 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>1,26 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Intermittent use/release</td>
<td>3,44 mg/l</td>
</tr>
<tr>
<td></td>
<td>Sewage treatment plant</td>
<td>24,8 mg/l</td>
</tr>
<tr>
<td>3-(2-ethylhexyloxy)propane-1,2-diol</td>
<td>Fresh water</td>
<td>0,15 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0,015 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>0,19 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>0,019 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>0,894 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Sewage treatment plant</td>
<td>5,6 mg/l</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection : Impervious gloves Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0.70 mm) made by KCL or gloves from other manufacturers offering the same protection.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures : Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : nearly colourless

Odour : characteristic

Odour Threshold : not determined

pH : 6 - 8 (20 °C)
  Concentration: 10 g/l
Freezing point: ca. 5 °C
Boiling point/boiling range: > 100 °C
Flash point: > 100 °C  Method: ISO 2719
Evaporation rate: not determined
Flammability (solid, gas): Not applicable
Upper explosion limit / Upper flammability limit: Not applicable
Lower explosion limit / Lower flammability limit: Not applicable
Vapour pressure: not determined
Vapour density: not determined
Relative density: ca. 1,087 - 1,092 g/ml (20 °C)
Solubility(ies)
   Water solubility: 10 g/l (20 °C)
Partition coefficient: n-octanol/water: Not applicable
Auto-ignition temperature: Not applicable
Viscosity
   Viscosity, dynamic: 28 mPa*s  Method: Rheo WIN RS 600
Flow time: < 15 s at 20 °C  Method: DIN 53211
Explosive properties: Not explosive
Oxidizing properties: The substance or mixture is not classified as oxidizing.

9.2 Other information
   Surface tension: 34 mN/m
   Refractive index: 1,522 - 1,534 at 20 °C
   Self-ignition: Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity
   Stable under recommended storage conditions.
10.2 Chemical stability
No decomposition if stored normally.

10.3 Possibility of hazardous reactions
Hazardous reactions : None reasonably foreseeable.

10.4 Conditions to avoid
Conditions to avoid : Protect from frost, heat and sunlight.

10.5 Incompatible materials
Materials to avoid : No data available

10.6 Hazardous decomposition products
None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

2-Phenoxyethanol:

Acute oral toxicity : LD50 (Rat): 1.850 mg/kg
Assessment: Harmful if swallowed.

Acute inhalation toxicity : (Rat): Exposure time: 8 h
Remarks: An LC50/ inhalation could not be determined because no mortality of rats was observed at the maximum achievable concentration.

Acute dermal toxicity : LD50: > 2.000 mg/kg
Remarks: Based on available data, the classification criteria are not met.

3-(2-Ethylhexyloxy)propane-1,2-diol:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on available data, the classification criteria are not met.

Acute inhalation toxicity : LC50 (Rat): 3.07 mg/l
Method: OECD Test Guideline 403
Assessment: Harmful if inhaled.

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on available data, the classification criteria are not met.
Skin corrosion/irritation

Components:

2-Phenoxyethanol:
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

3-(2-Ethylhexyloxy)propane-1,2-diol:
Method: OECD Test Guideline 404
Result: Slight irritation
Remarks: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Components:

2-Phenoxyethanol:
Species: Rabbit
Assessment: Causes serious eye irritation.
Method: OECD Test Guideline 405

3-(2-Ethylhexyloxy)propane-1,2-diol:
Method: OECD Test Guideline 405
Result: Risk of serious damage to eyes.
Test substance: Concentrate

Respiratory or skin sensitisation

Components:

2-Phenoxyethanol:
Test Type: Maximisation Test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Did not cause sensitisation on laboratory animals.

3-(2-Ethylhexyloxy)propane-1,2-diol:
Method: OECD Test Guideline 406
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

2-Phenoxyethanol:
Germ cell mutagenicity Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

3-(2-Ethylhexyloxy)propane-1,2-diol:
SAFETY DATA SHEET  
according to Regulation (EC) No. 1907/2006 

**euxyl® PE 9010  No Change Service!**

Version: 05.01  Revision Date: 04.02.2019  Date of last issue: 22.03.2016

Revision Date: 04.02.2019  Date of first issue: 10.11.2003

---

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

### Genotoxicity in vitro
- **Method**: OECD Test Guideline 471
- **Result**: Not mutagenic in Ames Test

### Genotoxicity in vivo
- **Method**: OECD 474
- **Remarks**: Micronucleus test: not mutagenic

### Carcinogenicity

**Components:**

**2-phenoxyethanol:**
- **Carcinogenicity - Assessment**: No data available

### Reproductive toxicity

**Components:**

**2-phenoxyethanol:**
- **Reproductive toxicity - Assessment**: Animal testing did not show any effects on fertility.

**3-(2-ethylhexyloxy)propane-1,2-diol:**
- **Effects on foetal development**: Species: Rat
  - Application Route: Oral
  - General Toxicity Maternal: NOAEL: 800 mg/kg body weight
  - Method: OECD Test Guideline 414

### STOT - single exposure

**Components:**

**2-phenoxyethanol:**
- **Remarks**: Based on available data, the classification criteria are not met.

### STOT - repeated exposure

**Components:**

**2-phenoxyethanol:**
- **Remarks**: No data available

### Repeated dose toxicity

**Components:**

**2-phenoxyethanol:**
- **Species**: Rat
- **NOAEL**: 400 mg/kg
- **Application Route**: Oral
- **Remarks**: Based on available data, the classification criteria are not met.
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

euxyl® PE 9010  No Change Service!

Version 05.01  Revision Date: 04.02.2019  Date of last issue: 22.03.2016
Date of first issue: 10.11.2003

3-(2-ethylhexyloxy)propane-1,2-diol:
Species: Rat
NOAEL: 100 mg/kg
Application Route: Oral
Exposure time: 28-day
Method: OECD Test Guideline 407
Remarks: Based on available data, the classification criteria are not met.

Species: Rat
NOAEL: 50 mg/kg
Application Route: Oral
Exposure time: 90-day

Aspiration toxicity
No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

2-phenoxyethanol:
Toxicity to fish: LC50 (Leuciscus idus (Golden orfe)): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50: > 500 mg/l
Exposure time: 48 h

Toxicity to algae: EC50 (Desmodesmus subspicatus (green algae)): > 500 mg/l
Exposure time: 72 h

Toxicity to fish (Chronic toxicity): NOEC: 23 mg/l
Exposure time: 34 d
Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 9.43 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

3-(2-ethylhexyloxy)propane-1,2-diol:
Toxicity to fish: LC50 (Brachidanio rerio): 60.2 mg/l
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna): 78.3 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae: IC50 (Desmodesmus subspicatus (green algae)): 48.3 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
**SAFETY DATA SHEET**
according to Regulation (EC) No. 1907/2006

**euxyl® PE 9010**  
No Change Service!

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date:</th>
<th>Date of last issue:</th>
<th>Date of first issue:</th>
</tr>
</thead>
<tbody>
<tr>
<td>05.01</td>
<td>04.02.2019</td>
<td>22.03.2016</td>
<td>10.11.2003</td>
</tr>
</tbody>
</table>

Toxicity to microorganisms:  
EC50: 560 mg/l  
Method: OECD 209

Toxicity to fish (Chronic toxicity):  
NOEC: 1.5 mg/l  
Exposure time: 35 d  
Species: Brachidanio rerio  
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):  
NOEC: 20 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

### 12.2 Persistence and degradability

**Components:**

2-phenoxyethanol:  
Biodegradability: Biodegradation: 90 - 100%  
Exposure time: 15 d  
Method: OECD Test Guideline 301A  
Remarks: According to the results of tests of biodegradability this product is considered as being readily biodegradable.

3-(2-ethylhexyloxy)propane-1,2-diol:  
Biodegradability: Result: According to OECD criteria, the product is inherently biodegradable.  
Method: OECD 302B/ ISO 9888/ EEC 88/302C

### 12.3 Bioaccumulative potential

**Components:**

2-phenoxyethanol:  
Bioaccumulation: Bioconcentration factor (BCF): 0,35  
Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n-octanol/water: log Pow: 1,16

3-(2-ethylhexyloxy)propane-1,2-diol:  
Partition coefficient: n-octanol/water: log Pow: 2,53

### 12.4 Mobility in soil

**Product:**  
Mobility: Remarks: No data available
Components:

2-phenoxyethanol:
Mobility: Remarks: Mobile in soils

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects

Product: Adsorbed organic bound halogens (AOX)
Remarks: Product does not contain any organic halogens.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product: Dispose of as hazardous waste in compliance with local and national regulations. The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste key for the unused product(Groups): The waste producer itself must, in consultation with the appropriate authorities and a waste disposal company, obtain a waste code from the EWC (European Waste Catalogue)

SECTION 14: Transport information

14.1 UN number
Not regulated as a dangerous good

14.2 UN proper shipping name
Not regulated as a dangerous good

14.3 Transport hazard class(es)
Not regulated as a dangerous good

14.4 Packing group
Not regulated as a dangerous good
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

euxyl® PE 9010  No Change Service!

Version 05.01  Revision Date: 04.02.2019  Date of last issue: 22.03.2016

Date of first issue: 10.11.2003

14.5 Environmental hazards
Not regulated as a dangerous good

14.6 Special precautions for user
Not applicable
For personal protection see section 8.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Not applicable

Volatile organic compounds : none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

15.2 Chemical safety assessment
Exempt

SECTION 16: Other information

Full text of H-Statements
H302 : Harmful if swallowed.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H332 : Harmful if inhaled.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations
Acute Tox. : Acute toxicity
Aquatic Chronic : Long-term (chronic) aquatic hazard
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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 Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equip-
Further information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Eye Dam. 1, H318 : Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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