SAFETY DATA SHEET

NOTE: This product is discontinued and cannot be sold on the EU market after October, 31 2020. Essilor does not update the SDS for an obsolete product. This SDS dated September 11, 2020 is the most recent SDS available.

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

1.1. Product identifier
Trade name or designation of the mixture
OPTIFOG Smart Textile

Registration number
-

Synonyms
OPTIFOG Smart Textile (grey cloth)

Issue date
07-June-2013

Version number
03

Revision date
11-September-2020

Supersedes date
08-July-2020

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses
Lens Cloth with substances which are intentionally released. Use as a standard lens cloth.

Uses advised against
None known.

1.3. Details of the supplier of the safety data sheet
Company name
ESSILOR International

Address
147, rue de Paris
94227 - Charenton-le-Pont – Cedex
France

Telephone
+33 (0) 1.49.77.42.24
+33 (0) 9.72.67.06.00

Contact person
Global EHS Department

E-mail
responsibleforsds@essilor.com

1.4 Emergency Telephone
Chemtrec +1-800-424-9300
+1-760-476-3961 Access Code: 334420

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards
Acute toxicity, oral
Category 4
H302 - Harmful if swallowed.

Specific target organ toxicity - repeated exposure
Category 2 (Spleen)
H373 - May cause damage to organs (Spleen) through prolonged or repeated exposure.

Environmental hazards
Hazardous to the aquatic environment, long-term aquatic hazard
Category 3
H412 - Harmful to aquatic life with long lasting effects.

Hazard summary
The classification above is for the liquid which is absorbed onto the wipe. Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Dangerous for the environment if discharged into watercourses.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains:
Partially Fluorinated Alkyl Polyether

Hazard pictograms

Signal word
Warning

Hazard statements
H302 Harmful if swallowed.
Precautionary statements

Prevention
P270 Do not eat, drink or smoke when using this product.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.

Response
P314 Get medical advice/attention if you feel unwell.
P301 + P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P330 Rinse mouth.

Storage
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information
None.

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>Index No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partially Fluorinated Alkyl Polyether</td>
<td>95 - 97%</td>
<td>N/A</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Classification: Acute Tox. 4;H302, STOT RE 2;H373, Aquatic Chronic 3;H412</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Phenoxyethanol</td>
<td>3 - 5%</td>
<td>122-99-6</td>
<td>204-589-7</td>
<td>603-098-00-9</td>
<td></td>
</tr>
<tr>
<td>Classification: Acute Tox. 4;H302, Eye Irrit. 2;H319</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Composition comments
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information
In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

Inhalation
Not relevant, due to the form of the product. However: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

Eye contact
Rinse with water. Get medical attention if irritation develops and persists.

Ingestion
Not relevant, due to the form of the product. In case of ingestion: If swallowed, seek medical advice immediately and show this container or label.

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

Direct contact with eyes may cause temporary irritation. Prolonged skin contact may cause temporary irritation. Prolonged exposure may cause chronic effects.

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

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards
No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media
None known.

5.2. Special hazards arising from the substance or mixture
During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures
Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Water runoff can cause environmental damage.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders
Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions
Inform appropriate managerial or supervisory personnel of all environmental releases. Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up
Prevent product from entering drains.

Large Spills: Collect in suitable container for disposal. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections
For non-emergency personnel
Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

For emergency responders
Inform appropriate managerial or supervisory personnel of all environmental releases. Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities
Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s)
Lens Cloth with substances which are intentionally released. Use as a standard lens cloth.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Occupational exposure limits
No exposure limits noted for ingredient(s).

Biological limit values
No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures
Follow standard monitoring procedures.

Derived no effect levels (DNELs)
Not available.

Predicted no effect concentrations (PNECs)
Not available.

8.2. Exposure controls
Appropriate engineering controls
Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information
Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection
For general public not normally needed. Applicable for industrial settings only. If contact is likely, safety glasses with side shields are recommended.

Skin protection
- Hand protection
For general public not normally needed. Applicable for industrial settings only. Wear appropriate chemical resistant gloves.

- Other
For general public not normally needed. Applicable for industrial settings only. Wear suitable protective clothing.

Respiratory protection
No personal respiratory protective equipment normally required.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.
Hygiene measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls
Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

**Appearance**
Cloth with substances which are intentionally released.

**Physical state**
Solid.

**Form**
Solid.

**Colour**
Grey.

**Odour**
Slight.

**Odour threshold**
Not available.

**pH**
Not available.

**Melting point/freezing point**
Not available.

**Initial boiling point and boiling range**
Not available.

**Flash point**
Not applicable.

**Evaporation rate**
Not applicable.

**Flammability (solid, gas)**
Not applicable.

**Upper/lower flammability or explosive limits**
Flammability limit - lower (%)
Not applicable.

Flammability limit - upper (%)
Not applicable.

**Vapour pressure**
Not available.

**Vapour density**
Not available.

**Relative density**
Not available.

**Solubility(ies)**
Slightly soluble in water.

**Partition coefficient (n-octanol/water)**
Not applicable.

**Auto-ignition temperature**
Not applicable.

**Decomposition temperature**
Not available.

**Viscosity**
Not available.

**Explosive properties**
Not explosive.

**Oxidising properties**
Not oxidising.

9.2. Other information

No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Material is stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
Contact with incompatible materials.

10.5. Incompatible materials
Strong oxidising agents.

10.6. Hazardous decomposition products
No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information
Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

**Inhalation**
Not likely, due to the form of the product.

**Skin contact**
Not expected to be a primary skin irritant.

**Eye contact**
Direct contact with eyes may cause temporary irritation.
Ingestion
Not relevant, due to the form of the product. However: Harmful if swallowed.

Symptoms
Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic effects.

11.1. Information on toxicological effects

Acute toxicity
Not relevant, due to the form of the product in its manufactured and shipped state. However: Harmful if swallowed.

Components | Species | Test Results
---|---|---

2-Phenoxyethanol (CAS 122-99-6)

<table>
<thead>
<tr>
<th>Acute</th>
<th>Dermal</th>
<th>LD50</th>
<th>Rabbit</th>
<th>&gt; 2214 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Rat</td>
<td>1840 - 4070 mg/kg</td>
</tr>
</tbody>
</table>

Partially Fluorinated Alkyl Polyether (CAS N/A)

<table>
<thead>
<tr>
<th>Acute</th>
<th>Dermal</th>
<th>LD50</th>
<th>Rat</th>
<th>&gt; 5000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inhalation</td>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 5.9 mg/l, 4 hours</td>
</tr>
<tr>
<td></td>
<td>Oral</td>
<td>LD50</td>
<td>Rat</td>
<td>410 mg/kg</td>
</tr>
</tbody>
</table>

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

Skin corrosion/irritation
Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye irritation
Due to partial or complete lack of data the classification is not possible.

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

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

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

Carcinogenicity
The product contains a small amount of a substance that is suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity
Benzyl chloride (CAS 100-44-7) 2A Possibly carcinogenic to humans.
Quinoline (CAS 91-22-5) 2B Possibly carcinogenic to humans.

Reproductive toxicity
Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - single exposure
Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure
May cause damage to organs (Spleen) through prolonged or repeated exposure.

Aspiration hazard
Due to the physical form of the product it is not an aspiration hazard.

Mixture versus substance information
No information available.

Other information
No other specific acute or chronic health impact noted.

SECTION 12: Ecological information

12.1. Toxicity
Harmful to aquatic life with long lasting effects.

Components | Species | Test Results
---|---|---

2-Phenoxyethanol (CAS 122-99-6)

<table>
<thead>
<tr>
<th>Aquatic</th>
<th>Algae</th>
<th>EC50</th>
<th>Desmodesmus subspicatus</th>
<th>100 mg/l, 72 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>Crustacea</td>
<td>LC50</td>
<td>Daphnia magna</td>
<td>488 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50</td>
<td>Pimephales promelas</td>
<td>344 mg/l, 96 hours</td>
</tr>
<tr>
<td>Chronic</td>
<td>Crustacea</td>
<td>NOEC</td>
<td>Daphnia magna</td>
<td>9.43 mg/l, 21 days</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>NOEC</td>
<td>Fish</td>
<td>220 mg/l, 8 days</td>
</tr>
</tbody>
</table>
Components | Species | Test Results
--- | --- | ---
Partially Fluorinated Alkyl Polyether (CAS N/A) | Pimephales promelas | 23 mg/l, 34 days

**Aquatic**

**Acute**

-Algae | EbC50 | Pseudokirchneriella subcapitata | 50.3 mg/l, 72 hours
| ErC50 | Pseudokirchneriella subcapitata | 88.3 mg/l, 72 hours

-Crustacea | EC50 | Daphnia magna | 28.8 mg/l, 48 hours

-Fish | LC50 | Oncorhynchus mykiss | 36.7 mg/l, 96 hours

12.2. Persistence and degradability
No data is available on the degradability of this product.

12.3. Bioaccumulative potential
No data available for this product.

**Partition coefficient**

-n-octanol/water (log Kow)
2-Phenoxyethanol (CAS 122-99-6) | 1.16

**Bioconcentration factor (BCF)**
Not available.

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**SECTION 13: Disposal considerations**

13.1. Waste treatment methods

-**Residual waste**
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

-**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

-**EU waste code**
The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

-**Disposal methods/information**
Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

**Special precautions**
Dispose in accordance with all applicable regulations.

**SECTION 14: Transport information**

-**ADR**
14.1. - 14.6.: Not regulated as dangerous goods.

-**RID**
14.1. - 14.6.: Not regulated as dangerous goods.

-**ADN**
14.1. - 14.6.: Not regulated as dangerous goods.

-**IATA**
14.1. - 14.6.: Not regulated as dangerous goods.

-**IMDG**
14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

**SECTION 15: Regulatory information**

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

**EU regulations**
- Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
  Not listed.
- Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended
  Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.
Not listed.
Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations
Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended
Not listed.

Restrictions on use
Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Benzyl chloride (CAS 100-44-7)
Quinoline (CAS 91-22-5)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.
Benzyl chloride (CAS 100-44-7)
Quinoline (CAS 91-22-5)

Other EU regulations
Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
Not listed.

Other regulations
The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

REACH Annex XVII: Quinoline (CAS 91-22-5) and Benzyl chloride (CAS 100-44-7) are listed in Annex XVII of REACH, Appendix 12, Entry 72. The concentration of Benzyl chloride (CAS 100-44-7) in the product is above the concentration limit established by Entry 72.

National regulations
Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations
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.
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TWA: Time Weighted Average.
vPvB: Very persistent and very bioaccumulative.
LD50: Lethal Dose 50%.
LC50: Lethal Concentration 50%.
EC50: Effective Concentration 50%.
NOEC: No observed effect concentration.
ErC50: EC50 in terms of reduction of growth rate.
EbC50: EC50 in terms of reduction of biomass

References
Information on evaluation method leading to the classification of mixture
The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15

H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Training information
Follow training instructions when handling this material.

Further information
NOTE: This product is discontinued and cannot be sold on the EU market after October 31, 2020. Essilor does not update the SDS for an obsolete product. This SDS, dated September 11, 2020 is the most recent SDS available.

Disclaimer
ESSILOR International cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.