

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name / designation : Episurf-Neo

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

Relevant identified uses : Epilame solution for surface treatment. Provides treated surfaces with hydrophobic and oleophobic properties.

1.3. Details of the supplier of the safety data sheetSupplier : SURFACTIS TECHNOLOGIES
22 rue Amsler, FR – 49100 ANGERS
Phone: +33 2 41 34 95 03**1.4. Emergency Telephone Number**

Ireland: +35 (0) 31 837 9964 (medical professionals) +35 (0) 31 809 2166 (public)

Malta: +356 2545 4030

United Kingdom: In England and Wales: dial 111 (NHS 111), In Scotland: dial 111 (NHS 24), In Northern Ireland: Contact your local GP or pharmacist during normal hours. During GP Out-of-Hours (www.gpoutofhours.hscni.net/): Belfast HSC Trust, (North & West) 028 9074 4447, (South & East) 028 9079 6220

South Eastern HSC Trust, (North Down & Ards) 028 9182 2344, (Lisburn & Downpatrick) 028 9260 2204, Dalriada Urgent Care (Northern Trust area) 028 2566 3500, Southern HSC Trust 028 3839 9201, Western Urgent Care 028 7186 5195

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Hazard statements
Aquatic Chronic 4	H413 May cause long lasting harmful effects to aquatic life.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms	-
Signal word	-
Product identifiers	-
Hazard Statements	H413 - May cause long lasting harmful effects to aquatic life.
Additional information	-
Precautionary Statements - General	-
Precautionary Statements - Prevention	P273 - Avoid release to the environment.
Precautionary Statements - Response	-
Precautionary Statements - Storage	-
Precautionary Statements - Disposal	P501 - Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Other hazards

The substances in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

Not available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance	C (%)	Classification	CAS Number	Note
reaction mass of (3E)-1,1,1,2,2,3,4,5,6,6,7,7,7-tridecafluoro-5-methoxyhept-3-ene and (2E)-1,1,1,2,3,4,5,5,6,6,7,7,7-tridecafluoro-4-methoxyhept-2-ene and (3E)-1,1,1,2,2,4,5,5,6,6,7,7,7-tridecafluoro-3-methoxyhept-3-ene EC N°:700-755-2	C>98%	Aquatic Chronic 4: H413	69296-04-4	-
Perfluoropolyether bisphosphonate	C<2%		1383252-94-5	08-202

3.2. Mixtures

Not available

3.3. Remark

Not available

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	:	Never give anything by mouth to an unconscious person or a person with cramps. Seek medical advice immediately. Take off immediately all contaminated clothing. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
Following inhalation	:	Provide fresh air. Get medical advice/attention if you feel unwell.
Following skin contact	:	Remove contaminated, saturated clothing immediately. Wash with plenty of water.
Following eye contact	:	After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
Following ingestion	:	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Observe risk of aspiration if vomiting occurs. Rinse mouth thoroughly with water.

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

Symptoms	:	Contact with eyes may cause the following symptoms: irritation, tearing, redness or discomfort. Ingestion may cause the following symptoms: aspiration may cause pulmonary edema and pneumonia.
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4.3. Indication of any immediate medical attention and special treatment needed

Special treatment	:	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Not available

5.2. Special hazards arising from the substance or mixture

This product is not flammable, fire or intense heat may cause the packaging to break.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO₂). Carbonyl fluoride. Hydrogen fluoride. Inhalation of decomposition products may cause health problems.

5.3. Advice for firefighters

Special protective equipment for firefighters

Use appropriate respiratory protection. Wear suitable protective clothing. Wear suitable gloves.

5.4. Additional information

Consult the appropriate authorities about waste disposal. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Use personal protection equipment. Evacuate area. Remove persons to safety.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Provide fresh air. Never use water. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Use appropriate container to avoid environmental contamination. Do not empty into drains.

6.4. Reference to other sections

Safe handling: see section 7. Personal protection equipment: see section 8. Disposal: see section 13.

6.5. Additional information

Not available

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Technical ventilation of workplace. Protect from direct sunlight. Warning! Container under pressure.

Protective measures

Advices on general occupational hygiene

Use personal protective equipment as required. Personal protection equipment: see section 8. Remove contaminated, saturated clothing. Wash hands before breaks and after work. Observe normal safety precautions when using chemicals. Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in original container. Protect from contamination. Contain leaks or spills within cabinets with removable trays. Store in a dry place. Store in a closed container. Avoid freezing, if stored below -10 ° C, mix before use.

Advice on joint storage

Materials to avoid:

No special material to report.

7.3. Specific end uses

No information available.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Not available

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Personal protection equipment



Eye/face protection

- : Suitable eye protection: Eye glasses with side protection.
When there is a possibility of contact with the face by spraying, spraying or contact with the material in the air, wear a face shield.

Skin protection

- : Hand protection: Suitable material:
Protective gloves resistant to solvents. The glove material has to be impermeable and resistant to the product / the substance / the preparation. Selection of the glove material depends on the penetration times, on the permeation rate and on degradation. Neoprene gloves. Gloves in viton (thickness 0.7 mm, duration of use 120min). The selection of suitable gloves depends not only on the material, but also on other quality criteria, which may vary

from manufacturer to manufacturer. Since the product represents a preparation composed of several substances, the resistance of the glove materials cannot be calculated in advance and must then be checked before use.

Hand protection: Breakthrough time: Breakthrough times and swelling properties of the material must be taken into consideration.

Body protection: Suitable protective clothing: Wear suitable protective clothing.

Respiratory protection : Suitable respiratory protection apparatus: In case of insufficient ventilation, wear suitable respiratory equipment. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Respiratory protection in accordance with EN137.

8.3. Additional information

Not available

SECTION 9: Physical and chemical Properties

9.1. Information on basic physical and chemical properties

Physical state:	LIQUID
Colour:	Colorless and clear
Odour:	Slight, musty
Odour threshold:	Not available
PH:	Not applicable
Melting point/freezing point:	<-80 ° C at 1 013 hPa
Initial boiling point and boiling range:	110 °C
Flash point:	Without °C
Evaporation rate:	Not available
Flammability:	Not applicable
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	28.8 hPa (25 ° C)
Vapour density:	Not available
Relative density:	1.58 g / cm ³ (25 ° C)
Solubility(ies):	0.15 mg / L, not miscible
Partition coefficient: n-octanol/water (Log KOC):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Explosive properties:	Not available
Oxidising properties:	Not available

9.2. Other safety information

Not available

SECTION 10: Stability and Reactivity

10.1. Reactivity

Stable at normal ambient temperature and pressure.

10.2. Chemical stability

This product is chemically stable. No decomposition if stored and handled according to specifications.

10.3. Possibility of hazardous reactions

No decomposition if stored and handled according to specifications.

10.4. Conditions to avoid

The product is not flammable in air at ambient temperature and pressure. Under pressure of oxygen or air, the mixture may become flammable.

10.5. Incompatible materials

Materials to avoid

Strong acid. Alkali metals. Alkaline earth metals powdered metals. Powdered metal salts.

10.6. Hazardous decomposition products

Hydrogen fluoride. Carbon monoxide. Carbonyl fluoride.

10.7. Additional information

Not available

SECTION 11: Toxicological information

11.1. Acute oral toxicity

Data for mixture

Not available

Substances

Not available

11.2. Acute skin toxicity

Data for mixture

Not available

Substances

Not available

11.3. Acute inhalation toxicity

Data for mixture

Not available

Substances

Not available

11.4. Skin corrosion

Data for mixture

Not available

Substances

Not available

11.5. Eye damage

Data for mixture

Not available

Substances

Not available

11.6. Skin sensitisation

Data for mixture

Not available

Substances

Not available

11.7. STOT RE

Data for mixture

Not available

Substances

Not available

11.8. STOT SE

Data for mixture

Not available

Substances

Not available

11.9. Carcinogenicity

Data for mixture

Not available

Substances

Not available

11.10. Reproductive and Developmental Toxicity

Data for mixture

Not available

Substances

Not available

11.11. Genotoxicity

Data for mixture

Not available

Substances

Not available

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity

Substances

reaction mass of (3E)-1,1,1,2,2,3,4,5,6,6,7,7,7-tridecafluoro-5-methoxyhept-3-ene and (2E)-1,1,1,2,3,4,5,5,6,6,7,7,7-tridecafluoro-4-methoxyhept-2-ene and (3E)-1,1,1,2,2,4,5,5,6,6,7,7,7-tridecafluoro-3-methoxyhept-3-ene (CAS:)

Animals / category : alga or cyanobacteria
Species : Pseudokirchneriella subcapitata (green algae)
test Duration : 72
Unit : h
Guideline : No acute toxicity effect was shown even at concentrations up to the solubility limit.

subendpoint	Value	Units
EC50	>0.000477	mg/L

Aquatic Chronic 1

Substances

reaction mass of (3E)-1,1,1,2,2,3,4,5,6,6,7,7,7-tridecafluoro-5-methoxyhept-3-ene and (2E)-1,1,1,2,3,4,5,5,6,6,7,7,7-tridecafluoro-4-methoxyhept-2-ene and (3E)-1,1,1,2,2,4,5,5,6,6,7,7,7-tridecafluoro-3-methoxyhept-3-ene (CAS:)

Animals / category : crustacea
Species : Daphnia magna (Big water flea).
Guideline : OECD 211
Exposure duration / value : 21
Exposure duration / unit : days
Remark substance : No acute toxicity effect was shown even at concentrations up to the limit of aqueous solubility.

subendpoint	Value	Units
NOEC	> 0.107	mg/L

12.2. Persistence and degradability

Biodegradability:

- Methoxytridecafluorohexene isomers / 28 days, biodegradation of 39.5%
Method OECD Guideline 302 Inherently biodegradable

12.3. Bioaccumulative potential

Bioconcentration factor (BCF)

Substances

reaction mass of (3E)-1,1,1,2,2,3,4,5,6,6,7,7,7-tridecafluoro-5-methoxyhept-3-ene and (2E)-1,1,1,2,3,4,5,5,6,6,7,7,7-tridecafluoro-4-methoxyhept-2-ene and (3E)-1,1,1,2,2,4,5,5,6,6,7,7,7-tridecafluoro-3-methoxyhept-3-ene (CAS:)

Species : Cyprinus carpio (carp)
Guideline : The substance has the potential to bioaccumulate

Bioconcentration factor (BCF)
1990

12.4. Mobility in soil

Data for mixture

Distribution : Koc: 31600
This product should not be mobile in soils.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

Global Warming Potential (GWP): <10.

12.7. Additional ecotoxicological information

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal

Waste treatment options: Appropriate disposal / Product:

Regenerate by distillation, incinerate or transfer to an authorized waste facility. Can be used after reconditioning. If recycling is not possible, dispose of according to local regulations.

Do not allow to enter into surface water or drains.

Waste treatment options: Appropriate disposal / Package:

If recycling is not possible, dispose of according to local regulations.

13.2. Additional information

Not available

SECTION 14: Transport information

14.1. UN number

Non classified

14.2. UN proper shipping name

- Land Transportation ADR/RID: non regulated

- Air Transportation ICAO/IATA: non regulated

14.3. Transport hazard class(es)

- Land Transportation ADR/RID: non classified

- Air Transportation ICAO/IATA: non classified

14.4. Packing group

Not available

14.5. Environmental hazards

Not available

14.6. Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

14.8. Additional information

Not available

SECTION 15: Regulatory information

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

Observe Directive 98/24 / EC on the protection of the health and safety of workers from the risks related to chemical agents at the workplace.

Not available

15.2. Chemical Safety Assessment

For this product a chemical safety assessment is not required.

15.3. Additional information

Not available

SECTION 16: Other information

Creation date: 15/11/2016
Version date: 28/09/2017
Printing date: 28/09/2017

16.1. Indication of changes

Not available

16.2. Abbreviations and acronyms

ADR: European Agreement on the Transport of Dangerous Goods by Road. IMDG: International Maritime Code for Dangerous Goods. IATA: International Air Transport Association. GHS: Globally Harmonized System of Classification and Labeling of Chemicals. EINECS: European Inventory of Existing Commercial Chemical Substances. ELINCS: European List of Notified Chemical Substances. CAS: Chemical Abstracts Service (Division of the American Chemical Society). DNEL: Derived No-Effect Level (REACH). PNEC: Predicted No-Effect Concentration (REACH). Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2. Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3. ATE: Acute toxicity assessment. CLP: labeling and packaging classification. EC50: average effective concentration. EN: European standard. EPA: environmental protection agency. EC50r: concentration where 50% inhibition of growth rate is observed. EyC50: concentration where an inhibition of 50% of the yield is observed. LC50 median lethal concentration. LD50 median lethal dose. LOEC minimum concentration with observed effect. LOEL minimum dose with observed effect. NOAEC no observed adverse effect level. NOAEL no observed toxic effect. NOEC no observed effect concentration. NOEL observed no effect level. OECD Organization for Economic Co - operation and Development. OPPTS Office of Prevention of Pesticides and Toxic Substances. PBT persistent bioaccumulative and toxic. STEL short-term limit value. TWA weighted value as a function of time.

16.3. Key literature references and sources for data

Not available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Not available

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

H413 May cause long lasting harmful effects to aquatic life.

16.6. Training advice

Not available

16.7. Additional information

Not available

The information given in this Safety Data Sheet is based on our present knowledge and on european and national regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.