



Zonyl® FS-300

Version 4.2

Revision Date 21.11.2012

Ref. 130000000615

This SDS adheres to the standards and regulatory requirements of Great Britain and may not meet the regulatory requirements in other countries.

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

1.1. Product identifier

Product name : Zonyl® FS-300

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

Use of the Substance/Mixture : Surfactant

1.3. Details of the supplier of the safety data sheet

Company : Du Pont de Nemours (Nederland) B.V.
Baanhoekweg 22
NL-3313 LA Dordrecht
Netherlands

Telephone : +31-78-630.1011

Telefax : +31-78-630.1181

E-mail address : sds-support@che.dupont.com

1.4. Emergency telephone number

Emergency telephone number : +44-(0)8456-006.640

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Dangerous for the environment : R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements



Dangerous for the environment

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S57 : Use appropriate container to avoid environmental contamination.
S60 : This material and its container must be disposed of as hazardous waste.
S61 : Avoid release to the environment. Refer to special instructions/ Safety data sheets.



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2.3. Other hazards

Inhalation of decomposition products in high concentration may cause shortness of breath (lung oedema).
Inhalation of aerosol or fine spray mist may cause serious respiratory problems.

SECTION 3: Composition/information on ingredients

Chemical nature of the mixture : Fluorotelomer dispersions

3.1. Substances

not applicable

3.2. Mixtures

Registration number	Classification according Directive 67/548/EEC	Classification according Regulation 1272/2008 (CLP)	Concentration
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Telomer B monoether with polyethylene glycol (CAS-No.65545-80-4)

	N;R51/53	Aquatic Chronic 2; H411	30 - 50 %
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The above products are REACH compliant; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process (biocide uses, plant protection products), etc.

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation : Move to fresh air. Oxygen or artificial respiration if needed. Symptoms may be delayed. Call a physician immediately.
- Skin contact : Wash off immediately with soap and plenty of water. Wash contaminated clothing before re-use.
- Eye contact : Rinse immediately with plenty of water for at least 15 minutes. Seek medical advice.
- Ingestion : Call a physician or poison control centre immediately. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

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

- Symptoms : Inhalation may provoke the following symptoms:, Shortness of breath, Lung oedema



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: Skin contact may provoke the following symptoms: Irritation, Discomfort, Itching, Redness, Swelling of tissue

: Eye contact may provoke the following symptoms: Lachrymation, Redness, Discomfort, Irritation

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

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : The product itself does not burn. Hazardous decomposition products formed under fire conditions. Hazardous combustion products: Hydrogen fluoride Carbon dioxide (CO₂) Carbon monoxide Other hazardous decomposition products may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Evacuate personnel to safe areas. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas. Use personal protective equipment. Ventilate the area.

6.2. Environmental precautions

Environmental precautions : Do not discharge to streams, ponds, lakes or sewers. Avoid subsoil penetration.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labelled containers.

6.4. Reference to other sections

For personal protection see section 8., For disposal instructions see section 13.



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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles. Do not breathe vapor or mist. Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion : To avoid thermal decomposition, do not overheat. Thermal decomposition can lead to release of irritating gases and vapours.

Do not spray on a naked flame or any incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Avoid freezing temperatures. Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

If sub-section is empty then no values are applicable.

8.2. Exposure controls

Engineering measures : Use only in area provided with appropriate exhaust ventilation.

Eye protection : Wear safety glasses or overall chemical splash goggles.
Eye protection complying with EN 166.

Hand protection : Material: Viton®
Protective gloves complying with EN 374.

: Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Skin and body protection : Lightweight protective clothing

Hygiene measures : Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before re-use.

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Full-face respirator with ABEK1-P3-filter
Respirator with a full face mask (EN136)



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	: liquid
Colour	: yellow, amber
Odour	: alcohol-like
pH	: 6.5 - 7.5
Boiling point/boiling range	: 100 °C at 1,013 hPa
Flash point	: > 93 °C , Method: Pensky-Martens closed cup - PMCC
Thermal decomposition	: > 200 °C
Density	: 9.4 lb/gal
Relative density	: 1.13 at 25 °C
Solubility in other solvents	: 40 g/l, at, ca.

9.2. Other information

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity	: Stable under recommended storage conditions.
10.2. Chemical stability	: Stable under normal conditions.
10.3. Possibility of hazardous reactions	: no data available
10.4. Conditions to avoid	: To avoid thermal decomposition, do not overheat. Do not freeze.
10.5. Incompatible materials	: no data available
10.6. Hazardous decomposition products	: Incompletely burned carbon products Other hazardous decomposition products may be formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicity to reproduction assessment

- Telomer B monoether with polyethylene glycol
No toxicity to reproduction

Human experience



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Excessive exposures may affect human health, as follows:

Inhalation

Lungs: Cough, Shortness of breath, Symptoms may be delayed.

Eye contact

Eyes: Excessive lachrymation, Blurred vision, Discomfort, Irritation

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish

- Telomer B monoether with polyethylene glycol
LC50 / 96 h / Pimephales promelas (fathead minnow): 19 mg/l

Toxicity to aquatic plants

- Telomer B monoether with polyethylene glycol
EC50 / 72 h / Scenedesmus capricornutum (fresh water algae): > 100 mg/l

Toxicity to aquatic invertebrates

- Telomer B monoether with polyethylene glycol
EC50 / 48 h / Daphnia magna (Water flea): 8.3 mg/l

12.2. Persistence and degradability

Biodegradability

The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

- Telomer B monoether with polyethylene glycol
According to the results of tests of biodegradability this product is not readily biodegradable.

12.3. Bioaccumulative potential

no data available

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

Additional ecological information



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This product was tested by OECD 301B or 67/548/EEC Annex V.C.4-C method and was found to meet the criteria to pass, which is 60% or greater theoretical CO₂ (ThCO₂) production within 28 days. If you have questions regarding the results of this test or the interpretation of the results from this study, please contact your DuPont representative.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : Dispose of in accordance with the European Directives on waste and hazardous waste.

Contaminated packaging : Offer rinsed packaging material to local recycling facilities.

SECTION 14: Transport information

ADR

- 14.1. UN number: 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Telomer B monoether with polyethylene glycol)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5. Environmental hazards: Environmentally hazardous
14.6. Special precautions for user: Tunnel restriction code: (E)
Not classified as dangerous in the meaning of sea and air transport regulations. Optional classification as per IATA Special Provision A97. Optional classification as per IMDG Special Provision 909.

IATA_C

- 14.1. UN number: 3082
14.2. UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Telomer B monoether with polyethylene glycol)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5. Environmental hazards : Environmentally hazardous
14.6. Special precautions for user: Not classified as dangerous in the meaning of sea and air transport regulations. Optional classification as per IATA Special Provision A97. Optional classification as per IMDG Special Provision 909.

IMDG

- 14.1. UN number: 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Telomer B monoether with polyethylene glycol, Telomer B monoether with polyethylene glycol)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5. Environmental hazards : Marine Pollutant
14.6. Special precautions for user: Not classified as dangerous in the meaning of sea and air transport regulations. Optional classification as per IATA Special Provision A97. Optional classification as per IMDG Special Provision 909.

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



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SECTION 15: Regulatory information

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

Other regulations : Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture.

SECTION 16: Other information

Text of R-phrases mentioned in Section 3

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under section 3.

H411 Toxic to aquatic life with long lasting effects.

Other information professional use

Further information

are registered trademarks or trademarks of E. I. du Pont de Nemours and Company or its affiliates.
No ES Annex has been created as to the best of our knowledge and information available at the date of its publication no Exposure Scenario information is currently available for the substances within the mixture. Please see Sections 1 to 16 of the Safety Data Sheet.

Significant change from previous version is denoted with a double bar.

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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.