



Oil and water repellent C6-based finishing

SEVOPHOB FHK-6 | FTC-6 | FWB-6 | UFK-6



Features and Benefits of Sevophob FHK-6

- ✓ Fluorocarbon resin for exceptionally high water and oil repellent finishing for all substrates
- ✓ Light beige emulsion
- ✓ Density approx. 1.1 g/cm³
- ✓ pH approx. 2.0-6.0
- ✓ C6 fluorochemicals
- ✓ Solvent-free, non-flammable
- ✓ Can be diluted as required with cold soft water
- ✓ Generally compatible with high-grade products; preliminary tests are advisable
- ✓ Excellent hydrophobic and oleophobic effect
- ✓ Permanent effect with regards to dry cleaning
- ✓ Wash resistant

Composition

Fluorocarbon resin

Ionogenic characteristics

Slightly cationic

Areas of application

Sevophob FHK-6 is used for the permanent hydrophobic and oleophobic finishing of textiles made from all common fibrous materials and their blends.

The finishing effects show excellent permanence with respect to household laundry and dry cleaning.



Application

Instructions for making solutions

Dilute **Sevophob FHK-6** with about twice the amount of cold water while stirring gently and then add to the application liquor, which is acidified (pH 4 – 5) with 1 ml/l of acetic acid.

In order to ensure that the appearance of the fabric is flawless, the article must be carefully pretreated and processing should be carried out with clean machines and equipment.

Residues of preparations, sizes, lubricants, softeners and alkaline, as well as residues of wetting and washing agents should be removed by appropriate washing and rinsing.

When using perfluorinated compounds in high-speed machines, care must be taken to ensure low shear resistance. High liquor turbulence should therefore be avoided.

To remove residual surfactants, we recommend the following treatment:

10 g/l	Lavan BL
	pH 5 – 6
40 – 60°C	20 min.
	then rinse cold

Quantities

Foulard/padding process

Cellulose fibres and mixtures	40.0 – 60.0 g/l	Sevophob FHK-6 Liquor pick-up approx. 60 – 80 % Dry 110 – 120°C Condense 160°C, 3 min. or 1 min. at 170 – 180°C
Synthetic fibres and mixtures	20.0 – 40.0 g/l	Sevophob FHK-6 Liquor pick-up approx. 60 – 80 % Dry 110 – 120°C Condense 160°C, 3 min. or 1 min. at 170 – 180°C

In the event of penetration problems we recommend the addition of

1.0 – 2.0 g/l	TC-Schnellnetzer FTI
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It is important to add penetration accelerator to the liquor before the fluorocarbon resin.

The use of silicone-based water repellents and softeners is not recommended, as these may reduce the stain-proofing effect with regard to oily stains.

Features and Benefits of Sevophob FTC-6

- ✓ Ecologically optimised fluorocarbon resin for permanent water, soil release and oil repellent finish
- ✓ Beige emulsion with slightly acidic reaction
- ✓ Density approx. 1.03 g/cm³
- ✓ pH approx. 2 – 5
- ✓ PFOA-/PFOS-free
- ✓ C6 fluorochemicals
- ✓ Solvent-free, non-flammable
- ✓ Butanone oxime-free
- ✓ Can be diluted as required with cold soft water
- ✓ Hardness and alkali-sensitive
- ✓ Enables full fabric feel
- ✓ No high condensation temperatures required
- ✓ Generally compatible with high-grade products; preliminary tests are advisable
- ✓ Excellent hydrophobic and oleophobic effect
- ✓ Permanent effect with regards to dry cleaning
- ✓ Wash resistant
- ✓ Slight yellowing or reduction of the degree of whiteness may occur when used on white goods
- ✓ Suitable for foam application
- ✓ Can be combined with optical brighteners; preliminary tests are advisable

Composition

Fluorocarbon resin

Ionogenic characteristics

Cationic

Areas of application

Sevophob FTC-6 is an ecologically optimised repellent and is used for permanent hydrophobic, oleophobic and soil release finishing of textiles made from cellulose and synthetic fibres, and their blends. The finishing effects show excellent permanence with regard to household laundry and dry cleaning.

Furthermore, the addition of **Sevophob FTC-6** allows a full fabric handle to be achieved. Due to the C6 fluorine chemical used, finished materials can be labelled as PFOA/PFOS free.

Sevophob FTC-6 condenses at low temperatures (140°C) and can therefore be used where it is not possible to achieve high condensation temperatures due to the material or machinery.

Application

Instructions for making solutions

Dilute **Sevophob FTC-6** with about twice the amount of cold water while stirring gently and then add to the application liquor which is acidified (pH 5 - 6) with 1 ml/l of acetic acid.

In order to ensure that the appearance of the fabric is flawless, the article must be carefully pretreated and processing should be carried out with clean machines and equipment.

Residues of preparations, sizes, lubricants, softeners and alkalis, as well as residues of wetting and washing agents should be removed by appropriate washing and rinsing.

When using perfluorinated compounds in high-speed machines, care must be taken to ensure low shear resistance. High liquor turbulence should therefore be avoided.

Parts of the emulsion may break as a result of the influence of shear forces due to longer stirring times with high speed mixers; this should be avoided at all costs. Any foam which forms on the surface should be skimmed.

To remove residual surfactants, we recommend the following treatment:

1.0 g/l	Lavan BL
	pH 5 - 6
40 - 60°C	20 min.
	then rinse cold

Quantities

Foulard/padding process

Cellulose fibres and mixtures	40.0 - 60.0 g/l	Sevophob FTC-6 Liquor pick-up approx. 60 - 80 % Condense 140°C, 2 min. or 160°C, 1 min.
Synthetic fibres and mixtures	30.0 - 50.0 g/l	Sevophob FTC-6 Liquor pick-up approx. 60 - 80 % Condense 140°C - 2 min. or 160°C, 1 min.

Variations in condensation temperature and duration are largely compensated by the high reactivity of **Sevophob FTC-6**. At the same time, this may result in a reduction in the condensation temperature or shortening of the condensation time.

Application

In the event of penetration problems we recommend the addition of

1.0 – 2.0 g/l TC-Schnellnetzer FTI

It is important to add penetration accelerator to the liquor before the fluorocarbon resin.

Sevophob FTC-6 is compatible with many cationic and non-ionic finishing agents.

If ease of care and chintz effects on synthetic/cellulose fibre blends need to be achieved in combination with the fluorocarbon resin finish, these are possible with most commercial high performance products. However, preliminary tests must always be carried out. We recommend the use of TC Reactant P/FC.

The use of silicone-based water repellents and softeners is not recommended, as these may reduce the stain-proofing effect with regard to oily stains.



Features and Benefits of Sevophob FWB-6

- ✓ Special fluorocarbon resin for permanent water and oil repellent finishing
- ✓ White-beige emulsion
- ✓ Density approx. 1 g/cm³
- ✓ pH approx. 3.5 – 4.5
- ✓ Based on C6 chemicals
- ✓ Solvent-free, non-flammable
- ✓ Can be diluted as required with cold soft water
- ✓ Hardness and alkali-sensitive
- ✓ Generally compatible with high-grade products; preliminary tests are advisable
- ✓ Excellent hydrophobic and oleophobic effect
- ✓ Permanent effect with regards to dry cleaning
- ✓ Wash resistant

Composition

Fluorocarbon resin

Ionogenic characteristics

slightly cationic

Areas of application

Sevophob FWB-6 is used for the permanent hydrophobic and oleophobic finishing of textiles made from cellulose and synthetic fibres.

The finishing effects achieved with Sevophob FWB-6 show excellent permanence with regard to household laundry and dry cleaning.

Textiles finished with Sevophob FWB-6 are free from PFOA/PFOS residues.

Application

Instructions for making solutions

Dilute Sevophob FWB-6 with about twice the amount of cold water while stirring gently and then add to the application liquor, which is acidified (pH 5 – 6) with 1 ml/l of acetic acid (60%).

In order to ensure that the appearance of the fabric is flawless, the article must be carefully pretreated and processing should be carried out with clean machines and equipment.

Residues of preparations, sizes, lubricants, softeners and alkalis, as well as wetting and washing agent residues, should be removed by appropriate washing and rinsing.

Application

To remove residual surfactants, we recommend the following treatment:

1.0 g/l **Lavan BL**
pH 5 – 6
40 – 60°C 20 min.
then rinse cold

Quantities

Foulard/padding process

Cellulose fibres 30.0 – 60.0 g/l **Sevophob FWB-6**
pH 5 – 6
liquor pick-up approx. 60 – 80 %
Dry
Condense 150 – 160°C,
2 – 1 min.

Synthetic fibres 20.0 – 50.0 g/l **Sevophob FWB-6**
pH 5 – 6
Liquor pick-up approx. 60 – 80 %
Dry
Condense 150 – 160°C,
2 – 1 min.

In the event of penetration problems we recommend the addition of

1.0 – 2.0 g/l **TC-Schnellnetzer FTI**

It is important to add penetration accelerator to the liquor before the fluorocarbon resin.

If the condensing temperature of at least 150°C can not be reached, it is possible to reduce it to 130 – 140°C with the addition of 10% **Sevophob-Aktivator BLT** based on the amount of FC resin.

If ease of care and chintz effects on synthetic/cellulose fibre blends need to be achieved in combination with the fluorocarbon resin finish, these are possible with most commercial high performance products. However, preliminary tests must always be carried out. We recommend the use of **TC-Reaktant P/NF**.

Slight yellowing or reduction of the degree of whiteness may occur when used on white goods.

Features and Benefits of Sevophob UFK-6

- ✓ Ecologically optimised fluorocarbon resin for exceptionally high water and oil repellent finishing
- ✓ Light beige emulsion with acidic reaction
- ✓ Density approx. 1.08 g/cm³
- ✓ pH approx. 3.0 – 5.0
- ✓ PFOA-/PFOS-free
- ✓ Only lower sensitivity to residues on the textile
- ✓ C6 fluorochemicals
- ✓ Solvent-free, non-flammable
- ✓ Can be diluted as required with cold soft water
- ✓ Hardness and alkali-sensitive
- ✓ No high condensation temperatures required
- ✓ Generally compatible with resin finishing products; preliminary tests are advisable
- ✓ Excellent hydrophobic and oleophobic effect
- ✓ Permanent effect with regards to dry cleaning
- ✓ Wash resistant
- ✓ Can be combined with optical brighteners; preliminary tests are advisable
- ✓ Wash resistant

Composition

Fluorocarbon resin

Ionogenic characteristics

Slightly cationic

Areas of application

Sevophob UFK-6 is an ecologically optimised repellent and is used for the permanent hydrophobic and oleophobic finishing of textiles from all common fibre materials and their blends. The finishing effects show excellent permanence with regard to household laundry and dry cleaning.

Due to the C6 fluorine chemicals used, finished materials can be labelled as PFOA/PFOS free.

Because of its high reactivity, **Sevophob UFK-6** condenses at low temperatures (> 120°C) and can therefore be used where it is not possible to achieve high condensation temperatures due to the material or machinery.

Application

Instructions for making solutions

Dilute **Sevophob UFK-6** with about twice the amount of cold water while stirring gently and then add to the application liquor, which is acidified (pH 5 - 6) with 1 ml/l of acetic acid.

In order to ensure that the appearance of the fabric is flawless, the article must be carefully pretreated and processing should be carried out with clean machines and equipment.

Residues of preparations, sizes, lubricants, softeners and alkalis, as well as residues of wetting and washing agents should be removed by appropriate washing and rinsing.

When using perfluorinated compounds in high-speed machines, care must be taken to ensure low shear resistance. High liquor turbulence should therefore be avoided.

To remove residual surfactants, we recommend the following treatment:

1.0 g/l	Lavan BL
	pH 5 - 6
40 - 60°C	20 min.
	then rinse cold

Quantities

Foulard/padding process

Cellulose fibres and mixtures	20.0 - 60.0 g/l	Sevophob UFK-6 Liquor pick-up approx. 60 - 80 % Dry 110 - 130°C Condense 150°C, 3 min. or 30 - 40 secs at 170 - 180°C
Synthetic fibres and mixtures	20.0 - 50.0 g/l	Sevophob UFK-6 Liquor pick-up approx. 60 - 80 % Dry 10 - 130°C Condense 150°C, 3 min. or 30 - 40 secs at 170 - 180°C

Variations in condensation temperature and duration are largely compensated by the high reactivity of **Sevophob UFK-6**. At the same time, this may result in a reduction in the condensation temperature or shortening of the condensation time.

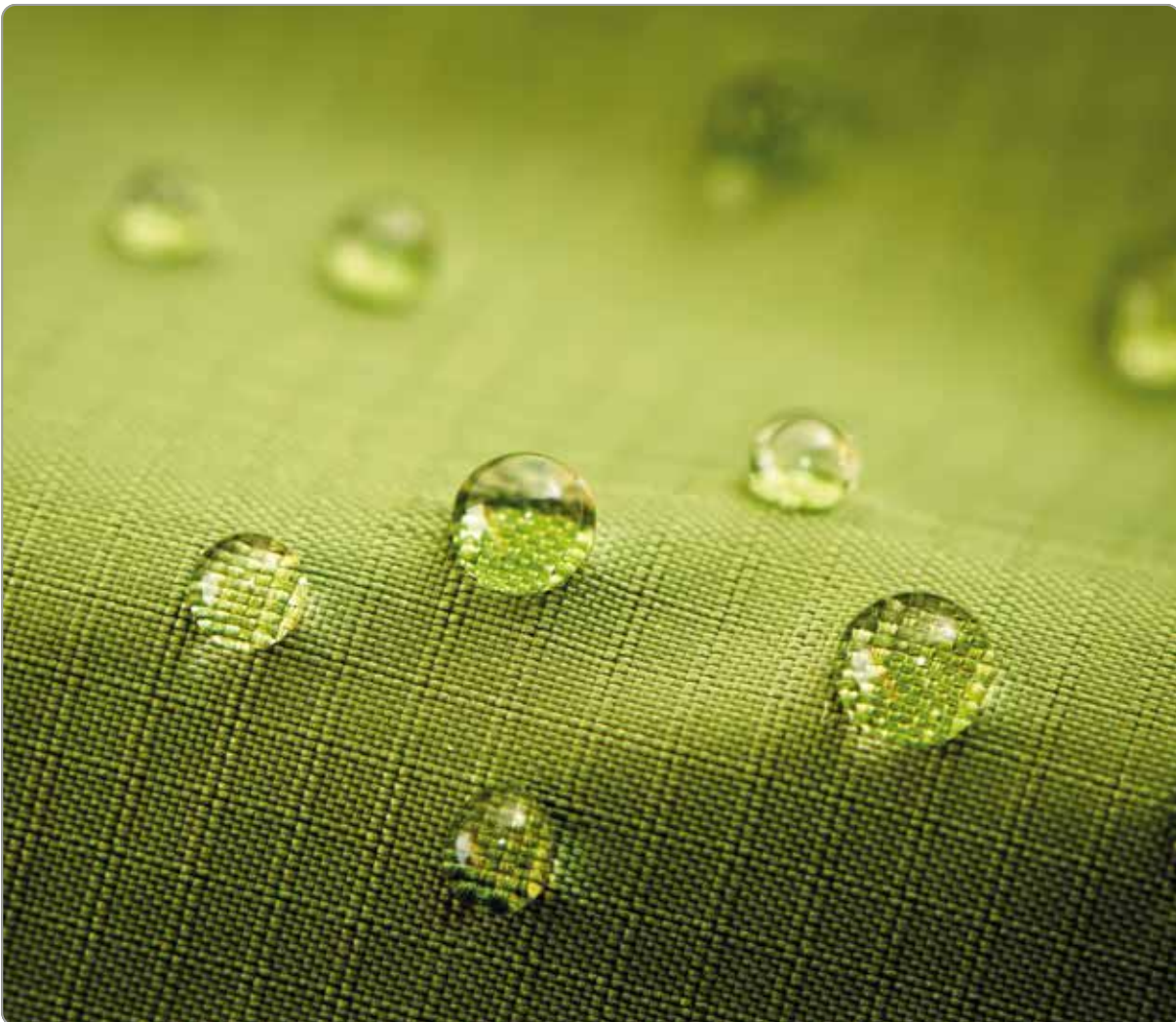
In the event of penetration problems we recommend the addition of

1.0 – 2.0 g/l **TC-Schnellnetzer FTI**

It is important to add penetration accelerator to the liquor before the fluorocarbon resin.

Sevophob UFK-6 is compatible with many cationic and non-ionic finishing agents. If ease of care and chintz effects on synthetic/cellulose fibre blends need to be achieved in combination with the fluorocarbon resin finishing, these are possible with most commercial high performance products. However, preliminary tests must always be carried out. We recommend the use of TC Reactant P/NF.

The use of silicone-based water repellent and softeners is not recommended, as these may reduce the stain-proofing effect with regards to oily stains.



Storage

When stored properly in closed original containers below 40°C, **Sevophob FHK-6** can be stored for at least 6 months. Storage at higher temperatures can cause irreversible damage. Protect from direct sunlight. Furthermore **Sevophob FHK-6** should be protected against frost when stored. With prolonged storage, the product solidifies below 0°C and this can cause irreversible damage. Usability should be checked before use.

When stored properly in closed original containers below 40°C, **Sevophob-Aktivator FTC-6** can be stored for at least 6 months. Storage at higher temperatures can cause irreversible damage. Protect from direct sunlight. Furthermore Sevophob FTC-6 should be protected against frost when stored. With prolonged storage, the product solidifies below 0°C and this can cause irreversible damage. Usability should be checked before use.

Sevophob FWB-6 can be stored for at least 6 months in closed containers at a temperature below 20°C. Sevophob FW B-6 should not be stored above 40°C or below 0°C. Product changes due to exposure outside of this range are not reversible.

When stored properly in closed original containers below 40°C, **Sevophob UFK-6** can be stored for at least 6 months. Storage at higher temperatures can cause irreversible damage. Protect from direct sunlight. Furthermore Sevophob UFK-6 should be protected against frost when stored. With prolonged storage, the product solidifies below 0°C and this can cause irreversible damage. Usability should be checked before use.

Further instructions for safe handling can be found in the safety data sheet.

The information and recommendations on our products reproduced here are based on extensive research and on our current practical experience in textile finishing. These are to be considered as non-binding advice - also with respect to third party property rights and foreign laws - and do not exempt users from testing the product and procedures for suitability for their own use. In particular, we assume no liability if used for purposes not expressly stated in writing by us. We reserve the right to make technical changes during product development. In the event of damage, we refer to our General Terms and Conditions of Sale and Delivery, Section 7.