

# **AVCO-PHOB 6612**

FREE PFOA WATER AND OIL REPELLENT AGENT FOR TEXTILES

AVCO-PHOB 6612 is a water-based fluorinated polymer emulsion synthesized only with short perfluorinated (C6) chains. It provides excellent water and oil repellency effect to these supports, as well as stain and chemical resistance (even after several washing cycles).

AVCO-PHOB 6612 does not change the original appearance of the treated materials.

Appearance	White to yellowish dispersion.
Chemical composition	Aqueous emulsion of fluoro-carbon co-polymer.
Ionic character	Weak cationic
Density (gr/cc)	1.00+/- 0.05
рН (5%)	Approx 3.0 – 5.5
Solubility	Disperse in water.
Compatibility	Can be used in neutral and acidic finishing baths.
Storage	Should be store at $5-40^{\circ}$ C. In this condition, it is stable at least for 6 months.

SPECIFICATION:

PROPERTIES & USES:

- 1. Free PFOA and excellent water & oil repellency.
- 2. Imparts excellent water and oil repellency to all types of fabrics: Resistance to rain and to water- and oil- based stains.
- 3. Extremely good performance at low temperature (suitable for PP).
- 4. High washing durability.
- 5. Good stability against both atmospheric conditions and UV-radiation.
- 6. The product has good compability with resin finish agents, cationic and nonionic softeners.



- 7. AVCO-PHOB 6612 can be used for finishing all types of natural and synthetic fibres.
- 8. The main uses of AVCO-PHOB 6612 are soil, oil and water repellent finishing of dress goods (raincoat fabric, anorak fabric, sportswear), upholstery, shower curtains awnings and tents as well as non-woven (inter-linings and automotive fabric).

## APPLICATION:

AVCO-PHOB 6612 can be applied by padding, spraying and exhaust processes. In order to achieve a uniform impregnation, it is necessary for the textile fabric to be absorbent. AVCO-PHOB 6612 will not react under alkaline conditions and impregnation should be made under acid conditions. In order to achieve good water and oil repellent effect, it is necessary to ensure that the fabric is free from residues of wetting agents, surfactants, raising agents, alkalis, sizes, unfixed dyes, carriers and other types of impurities. Also check influence of other finishing agents used in the finishing bath on the water and oil repellency effect. Add the AVCO-PHOB 6612 pre-diluted with cold water 1:2. While mixing avoid excessive shear.

#### GUIDING RECIPES:

## **1.** Polyester and polyamide fabrics:

AVCO-PHOB 6612 20 - 50 g/l pH=4.0-5.0

Dry, cure at 160 – 200°C for 1 to 2 minutes

# 2. Cotton fabrics - resin finish:

Acetic Acid (60%)	0.2 -0.5	g/l
AVCO-REZ ECO CONC	40 - 60	g/l
AVCO-CATALYST PMC	8 - 12	g/l
AVCO-PHOB 6612	10 - 40	g/l

pH=4.0-5.0 Dry, cure at 160 – 200°C for 1 to 2 minutes

# 3. Wool fabrics

Treat by exhaust process, at pH=4.0-5.0 for 30 minutes at  $40^{\circ}$ C, apply 2-4% o.w.g. Dry and cure at 160 - 200°C for 1-2 minutes.

#### 4. Water repellent and anti-stain finish for Cotton and Pe/Co blends

AVCO-PHOB 6612	20 - 50 g/l
AVCO-ELASTOSIL 3920	20 – 40 g/l
Acetic acid	0.2 – 0.5 g/l

Dry, cure at 170°C for 1 to 2 minutes

## 5. Water repellent and anti-stain finish for Pe and Pe/Co blends

AVCO-PHOB 6612	20 - 50 g/l
AVCO-ELASTOSIL 3920	20 – 40 g/l
Acetic acid	0.2 – 0.5 g/l

The information given in this bulletin is, to the best of our knowledge accurate. It is intended to be helpful is not to be considered a guarantee. Date: \*05/17 Code: PHOB.6612 Page 2 of 3



Technical – Information

pH=4.0-5.0

Dry, cure at 170°C for 1 to 2 minutes

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