

Technical - Information

AVCO-PHOB FC 2904

WATER AND OIL REPELLENT AGENT FOR TEXTILES

AVCO-PHOB FC 2904 is used to produce permanent water and oil repellent finishing of textiles based on polyester, polyamide, acrylic, wool and cellulosic fibres and their blends. The finish is resistant to repeated laundries with excellent durability, and no effect on the breathability and handle of the treated fabrics.

SPECIFICATION:

Appearance	White emulsion.
Chemical composition	Aqueous emulsion of fluoro-carbon co-polymer.
Ionic character	Amphoteric.
Density (gr/cc)	1.00+/- 0.05
pH (1%)	Approx 2.5
Solubility	Miscible with water at any ratio.
Compatibility	Can be used in neutral and acidic finishing baths.
Storage	Sensitive to frost. Store in a cool place. When properly stored stable for at least 12 months.

PROPERTIES & USES:

1. Excellent water & oil repellency.
2. Good dry soil removal.
3. Good wash and dry-cleaning fastness.
4. Has no influence on the hand of the treated fabrics.
5. The finish has good breathability.
6. The product has good compability with resin finish agents, cationic and nonionic softeners.
7. No catalyst addition is needed when AVCO-PHOB FC 2904 is used alone.
8. When properly cured, the finishing effect is fast to repeated laundries.
9. AVCO-PHOB FC 2904 can be used for finishing all types of natural and synthetic fibres.
10. The main uses of AVCO-PHOB FC 2904 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).

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APPLICATION:

AVCO-PHOB FC 2904 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 FC 2904 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 FC 2904 pre-diluted with cold water 1 : 2.

While mixing avoid excessive shear.

GUIDING RECIPES:

1. Polyester and polyamide fabrics

AVCO-PHOB FC 2904	10 – 50	g/l
Acetic acid	0.5 – 1	g/l
Dry, cure at 160 – 200°C for 1 to 2 minutes.		

2. Cotton fabrics - resin finish

Acetic Acid (60%)	1	cc/l
AVCO-REZ ECO CONC	40 – 60	g/l
Catalyst PMC	8 – 12	g/l
AVCO-PHOB FC 2904	10 – 40	g/l
Dry, cure at 160 – 200°C for 1 to 2 minutes.		

3. Wool fabrics

Treat by exhaust process, at pH = 4.5 - 5 for 30 minutes at 40°C, apply 2 - 4% o.w.g.
Dry at 100 - 110°C 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 FC 2904	20 – 50	g/l
AVCO-ELASTOGUM 3640	20 – 40	g/l
Acetic acid	0.5 – 1	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 FC 2904	20 – 50	g/l
AVCO-NAR SR	20 – 40	g/l
Acetic acid	0.5 – 1	g/l
Dry, cure at 170°C for 1 to 2 minutes.		