

AVCO-PHOB 6614

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.

SPECIFICATION:

| | |
|-----------------------------|---|
| 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 |
| pH (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°C. In this condition, it is stable at least for 6 months. |

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.

Technical – Information

7. AVCO-PHOB 6614 can be used for finishing all types of natural and synthetic fibres.
8. The main uses of AVCO-PHOB 6614 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 6614 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 6614 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 6614 pre-diluted with cold water 1:2. While mixing avoid excessive shear.

GUIDING RECIPES:

1. 100% Cotton or T/C:

| | | |
|---|-----------|-----|
| AVCO-PHOB 6614 | 20 - 50 | g/l |
| AVCO-ELASTOSIL 3920 | 10 - 30 | g/l |
| Acetic Acid (60%) | 0.2 - 0.5 | g/l |
| pH=4.0-5.0 | | |
| Dry, cure at 160 – 200°C for 1 to 2 minutes | | |

2. 100% PA or 100% PES:

| | | |
|---|-----------|-----|
| Acetic Acid (60%) | 0.2 - 0.5 | g/l |
| AVCO-PHOB 6614 | 20 - 40 | g/l |
| pH=4.0-5.0 | | |
| Dry, cure at 160 – 200°C for 1 to 2 minutes | | |

3. 100% Cotton

| | | |
|---|-----------|-----|
| Acetic Acid (60%) | 0.2 - 0.5 | g/l |
| AVCO-PHOB 6614 | 20 - 40 | g/l |
| pH=4.0-5.0 | | |
| Dry, cure at 160 – 200°C for 1 to 2 minutes | | |

HYDRO-REPELLENCE ON TEXTILE FABRICS

| Material | g/L | 10 washes* | 40 washes* |
|---------------|-----|------------|------------|
| Cotton | 40 | 100 | 80 – 90 |
| PES | 20 | 100 | 90 – 100 |
| PA | 20 | 100 | 100 |

*according AATCC 22, after laundry washing (40°C – 30 minutes)

OIL-REPELLENCE ON TEXTILE FABRICS

| <i>Material</i> | <i>g/L</i> | <i>15 washes*</i> | <i>40 washes*</i> |
|----------------------|------------|-----------------------|-----------------------|
| <i>Cotton</i> | 40 | 5 | 4 – 5 |
| <i>PES</i> | 20 | 6 | 5 |
| <i>PA</i> | 20 | 6 | 6 |

*according AATCC 118, after laundry washing (40°C – 30 minutes)