

AVCO-PHOB NF

NON-FLUORINE WATER REPELLENT

AVCO-PHOB NF is a Fluourine-free water repellent designed to produce permanent water repellent finishes on articles of all fibres such as Cellulosic and synthetic fibres, wool and their blends.

The finish is resistant to repeated laundries and dry cleaning with excellent durability, and no effect on the breathability of the treated fabrics.

AVCO-PHOB NF is produced according to updated ECO and SAFETY regulations.

SPECIFICATIONS:

Appearance	Light beige to white liquid.
Chemical composition	Aqueous emulsion of non-flourine polymer.
Ionic type	Weak cationic
pH (as is)	3 - 7
Solubility	Readily miscible with cold or warm water.
Compatibility	Can be used in acidic finishing baths. Check compatibility with anionic products. Should be applied with softened water.
Storage	Sensitive to frost. Store in a cool place. When properly stored stable for at least 12 months.

PROPERTIES & USES:

1. Optimum water repellency effect, especially suitable for cotton and blends.
2. The finish has good breathability.
3. Better water repellency than wax or silicone based products
4. Finishing with AVCO-PHOB NF, when properly cured, is resistant to repeated washing and dry cleaning.
5. AVCO-PHOB NF free from PFCs and banned substances.
6. Mainly applied by padding, spray method and in foam application in some cases.
7. Does not have the adverse effect either on the shade or colour fastness of the treated fabric

APPLICATION:

In order to achieve good water repellency, 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.

Check the influence of other finishing agents and softeners used in the finishing bath on the water repellency effect.

Add the AVCO-PHOB NF pre-diluted with water, while mixing avoid excessive shear.

If synthetic resins or other products are to be applied at the same time, they should be pre-dissolved in the water. When wetting agent (such as isopropyl alcohol or isobutyl alcohol) is used, it is essential that the alcohol must be thoroughly dissolved and diluted before other bath component are added.

GUIDING RECIPES:

AVCO-PHOB NF is applicable in padding, spraying, foam processes. Padding process ensures the best effect. With spray method, sufficient exhaustion is essential and respiratory protection must be used

1. General application :

PRODUCT	POLYESTER, POLYAMIDE	T/C, T/R	COTTON, WOOL
AVCO-PHOB NF	40 – 80 g/l	60 – 80 g/l	60 – 100 g/l
pH	5 - 6	5 - 6	5 - 6

Pad (1 dip, 1 nip) ,pick up 60 -80% (according to the type of fiber)

Predry at 110 – 130 for 2 mins

Cure at 140°C for 2 minutes or 1 minute at 160°C (higher curing temperature can bring better effect on washing durability)

2. For long durable water repellency under frequent laundering :

PRODUCT	POLYESTER, POLYAMIDE	T/C, T/R	COTTON, WOOL
AVCO-PHOB NF	60-100 g/l	80-100 g/l	100-150 g/l
AVCO-FIX FB	10-30% of PHOB NF	10-30% of PHOB NF	10-30% of PHOB NF
pH	5 - 6	5 - 6	5 - 6
Pre-dry	160°C x 30 sec	150°C x 60 sec	140°C x 120 sec
Cure	180°C x 30 sec	170°C x 60 sec	160°C x 120 sec