

## AVCO-FINISH RSH

### HYDROPHILIC SILICONE FINISH

AVCO-FINISH RSH is a cationic silicone softener which imparts excellent hydrophilicity and a wicking effect especially to cellulose and synthetic micro-fibres.

AVCO-FINISH RSH is producing good permeability to water vapours through the treated textiles.

AVCO-FINISH RSH has excellent wicking properties, and is recommended for finishing sport wear. The product speeds up the drying of sweat out of the human skin when training with sport clothing finished with it.

AVCO-FINISH RSH is a non-yellowing softener and is highly recommended for finishing white fabrics. It prevents the tendency of white fabrics to lose whiteness degree at elevated temperatures. The product is not sensitive to residual alkalinity in bleached or dyed cotton yarns.

#### SPECIFICATIONS:

<b>Appearance</b>	Almost clear, colourless liquid.
<b>Chemical nature</b>	Aqueous compound of organo modified polysiloxane
<b>Ionic type</b>	Cationic
<b>Solubility</b>	Miscible with water at any ratio.
<b>Density (g/cc)</b>	1.0
<b>pH (10% sol.)</b>	4 - 6
<b>Compatibility</b>	Can be used together with non-ionic and cationic products.
<b>Storage</b>	Freezes at 0°C, but is fully usable after thawing and stirring. Shelf life is at least 12 months.

#### PROPERTIES & USES:

1. AVCO-FINISH RSH imparts a special smooth and very soft handle to the treated textiles.
2. Imparts excellent hydrophilic and wicking properties to the finished textiles.
3. Improves moisture transportation and good water vapours transmission through the treated textiles.
4. The finishing effect is wash resistant.
5. AVCO-FINISH RSH improves dimensional stability and elasticity of knits.
6. AVCO-FINISH RSH improves the sew-ability of the treated fabrics.
7. AVCO-FINISH RSH improves wash and wear properties.
8. Non-yellowing on white fabrics, even when used at curing conditions.
9. Recommended for high temperature molding processes.

10. Suitable for application in jets, spraying machines, garments washing machines and by padding processes.
11. AVCO-FINISH RSH is not sensitive to residual alkalinity in the treated textiles. It can be applied in a wide pH range of 1 – 12.
12. AVCO-FINISH RSH is not sensitive to residues of anionic optical brighteners when applied to bleached cotton fabrics.
13. Good compatibility with electrolytes, recommended for resin finishing recipes.
14. Recommended for all types of fibres such as: cotton, viscose, wool, polyester, acrylic, polyamide and all kinds of blends.
15. Can be used together with non-ionic and cationic hydrophilic softeners, and other finishing agents such as resins.
16. Fabrics finished with AVCO-FINISH RSH can be over-printed or over-dyed.

**APPLICATION:**

AVCO-FINISH RSH should be diluted with water at a ratio of 1:2 up to 1:3 before application.

The treated fabrics should be clean from any residual contaminations such as anionic substances, sizing products, lubricating oils etc. which may cause liquor instability.

The application bath should be acidified with acetic or formic acid to pH 4.5 – 5.5 before adding the AVCO-FINISH RSH.

The recommended amount of AVCO-FINISH RSH to be applied to the treated textile is determined by the required effect.

Usually a dosage of 2 – 4% on weight of the fabrics is recommended for cotton terry fabrics and knitwear.

For finishing polyester and polyamide knits the recommended dosage is 1 – 3% on weight of the fabrics.

**TYPICAL RECIPES:**

**1. Exhaustion method**

Apply 1 -4% of AVCO-FINISH RSH is applied in a fresh bath at pH of 4.5 – 5.5.

Temperature: 40°C

Time: 20 minutes

pH: 4.5 – 5.5 (adjust with acetic acid)

Hydro-extract and dry at usual conditions (<180°C).

**2. Padding method**

Depending on the material, the pick-up and the effect required, apply 15 - 50 g/l of AVCO-FINISH RSH. Special fixation process is not required.

**3. Application in resin finishing bath**

Apply by padding the following recipe:

AVCO-REZ LFR CONC      30 – 60 g/l

AVCO-FINISH RSH          20 – 40 g/l

Magnesium chloride      8 – 15 g/l

Acetic acid (60%)          0.5 – 1 g/l

Dry at 120 - 130°C and cure 170°C for 30 – 60 sec. or at 150°C for 3 min.