

AVCO-FIX NRC 90

FIXING AGENT FOR DYEING POLYAMIDE MICRO FIBRES

AVCO-FIX NRC 90 is an after-treatment agent to improve the washing fastness of polyamide microfibres dyed or printed with acid dyestuffs. It is also used as a resist agent in dyeing polyamide blends.

Greatly improves the washing fastness of polyamide and spandex blends.

AVCO-FIX NRC 90 does not affect neither the shade nor the light fastness of the dyeings.

SPECIFICATIONS:

Appearance	Yellow to brown slightly viscous liquid. May become darker during long storage.
Chemical nature	Aqueous solution of a sulfonated condensate
Ionic type	Anionic
Density	1.067 g/cc
Solubility	Miscible with water at any ratio
pH (1% sol)	3 .0 – 3.5
Compatibility	<ul style="list-style-type: none"> - Compatible with anionic products and with acids, alkalis, and hard water. - Incompatible with cationic dyestuffs and auxiliaries. Non-ionics may reduce its effectiveness.
Storage	Freezes below 0°C. Fully usable after thawing. Shelf life is at least 12 months.

PROPERTIES & USES:

1. Very effective for improving wet fastness properties of acid dyes on polyamide fibres. Designed specially for improving wet fastness of polyamide microfibres, and for polyamide spandex blends.
2. Does not affect the shade nor the light fastness of the dyeings. The fastness improvement of the treated fabrics is not impaired by further thermo-fixation.
3. Resist agent for dyeing polyamide blends with cellulose or wool.

Technical - Information

4. Excellent fixing agent for polyamide fabrics printed with acid dyes, prevents staining of white grounds. No effect on treated fabrics handle. Stable to acids
5. Suitable for application in high-speed jet machines.
6. Suitable for production of textiles conform with the Ökotex standard 100.

APPLICATION:

Pre-dilute the product with warm water (35 -45°C) before use.

The product has a low pH, so often no need to add acid to the bath.

Care should be taken to avoid any residues of non -ionic/cationic levellers such as fatty amine polyglycols on the fibres. Fabrics should be rinsed well before the treatment with AVCO-FIX NRC 90.

1. After Treatment of dyed polyamide

- a) After dyeing, rinse the fabrics thoroughly. Cationic and non -ionic auxiliaries must be removed before applying AVCO-FIX NRC 90.
- b) Fill the dyeing machine with fresh water and warm to 40°C. Add 2-6% of AVCO- FIX NRC 90.
- c) Check the pH, if necessary add acetic or formic acid to pH 3.5-4.0.
- d) Heat up at 1.5°C/min. to 80°C and treat for 15-20 minutes.
- e) Rinse 2 times thoroughly until pH is neutral.

2. After Treatment of polyamide prints

- a) Rinse with cold water containing 1 -2 g/l of AVCO-L PAM (adjust to pH=9-10 with soda ash).
- b) Rinse at 60°C with 1-2 g/l of AVCO-L PAM (adjust to pH=9-10 with soda ash).
- c) Rinse cold.
- d) Treat with 1-3% of AVCO-FIX NRC 90 at pH 3.5-4 for 10-15 min. at 60°C.
- e) Rinse until pH is neutral.

3. Resist agent for dyeing wool/polyamide and polyamide/cellulose blends

The quantities of AVCO-FIX NRC 90 required depend primarily on the dyes used and on the type of polyamide fibre. Nylon 6, for example, requires higher quantities of blocking agent than nylon 6.6. The exact amount required is best determined by preliminary trials. It has been found that 1 -3% of AVCO-FIX NRC 90 are suitable for most purposes.

4. Special improvement of wet fastness of polyamide microfibres

Since microfibres need more dyestuffs to reach depth, improving of fastness is essential.

- a) Treat with 1- 3% of AVCO-FIX NRC 90 at pH- 3.5-4, 70°C for 30 min.
- b) Rinse well at 50°C (2 times)
- c) Treat with 1-2% of AVCO-FIX NRC at pH-5.0-5.5, 40°C for 15 min.

AVCO-FIX ECO treatment can also be done on the stenter before final drying/fixing.

5. Stripping-off AVCO-FIX NRC 90

To correct dyeing, the AVCO-FIX NRC 90 should be stripped-off the fibres.

Soda ash	1.0 - 2.0 g/l
AVCO-L PAM	3.0 g/l

Treat at 98°C for 30 min.

1 cc/l of caustic (50%) can also be used instead of soda, but it may influence the shade.