

AVCO-CAR NTO

NON-TOXIC COVERING AND LEVELLING FOR POLYESTER DYEING.

AVCO-CAR NTO is an efficient accelerator, with very good levelling and migrating properties for dyeing polyester yarns and fabrics in atmospheric and H.T. dyeing machines.

AVCO-CAR NTO is an almost odourless, non-toxic product.

AVCO-CAR NTO have a good covering effect, can level-out barness problem and produce excellent coverage of stripes

SPECIFICATIONS:

Chemical nature	Compound of anionic and non-ionic emulsifiers with aromatic ester.
Appearance	Clear, light yellow liquid.
Ionic nature	Anionic / non-ionic.
pH (1% sol.)	3.0 – 4.0
Solubility	Self emulsifiable, produces milky emulsion in water.
Compatibility	Good with anionic and non-ionic products.
Storage stability	Store in cool places. Do not store in direct sun. When properly stored stable for at least 12 months.

PROPERTIES & USES:

1. The active ingredients of AVCO-CAR NTO are non-toxic, non-volatile with low odour. The product does not contain any chlorinated aromatic compounds (AOX free) and does not contain volatile solvents.
2. AVCO-CAR NTO can be used in open dyeing machine at the boil with no odour problems.
3. High leveling performance and prevent the unevenness of dyeing caused by the un-uniform tension, the mechanical shocks, the differences in affinity caused by the polyester fibers

4. AVCO-CAR NTO is self-emulsifiable and free rinsing dyeing accelerator.
5. AVCO-CAR NTO has neither influence on the color fastness nor giving any adverse effect on dyed polyester.
6. Dispersion stability of disperse dyes is not impaired by AVCO-CAR NTO.
7. AVCO-CAR NTO is suitable for leveling out and brightening off-shade polyester dyeings.
8. AVCO-CAR NTO is recommended for stripping off disperse dyes from polyester fibres.
9. AVCO-CAR NTO is suitable for dyeing 100% polyester as well as for dyeing blends of polyester with other fibres.

APPLICATION:

1. Dosing recommendations are the following

At the boil	2.0 - 6.0 g/l
At 102-115°C	1.5 - 3.0 g/l
At 120-130°C	0.5 - 1.5 g/l

When dyeing darker shade a higher dosing is recommended. The application amount of AVCO-CAR NTO depends on dyeing temperature and colour depth, type of polyester fibre, liquor ratio, and machine type.

2. Dyeing procedure of polyester at the boil

Scour and rinse fabrics or yarns thoroughly.

Set dye - bath at 50°C and add the following ingredients:

AVCO-CAR NTO	2 – 6 g/l
AVCO-DISPERSANT NS	1 – 2 g/l

Adjust pH to 4.5 - 5.

Run goods while heating to 60°C

Add slowly sieved dispersion of disperse dyestuffs.

Raise the temperature to the boil over 30 minutes

Continue to dye for 60 - 90 minutes at the boil. Check colour yield.

Cool down to 85°C, overflow and rinse well.

Reduction clearing with:

Caustic soda (50%)	2 - 4 cc/l	
Sodium hydrosulfite	2 - 3 g/l	
AVCO-CLEAN SUPER	1 - 2 g/l	(optional)

Run at 70-80°C, for 20 minutes, neutralize and rinse.

3. HT dyeing of Polyester for improved levelness.

AVCO-CAR NTO	0.5 - 1.5 g/l
AVCO-DISPERSANT NS	1.0 – 2.0 g/l

Adjust pH to 4.5-5

Dye for 30-45 min. at 120-130°C.

4. Leveling and repairing of faulty dyeing in the jet (H.T.)

AVCO-CAR NTO 4.0 - 12.0 g/l

Adjust pH to 4.5 - 5

Run at 120-130°C for 30-60 minutes.

5. Leveling and repairing of faulty dyeing at the boil

AVCO-CAR NTO 6.0 - 12.0 g/l

Adjust to pH of 4.5 – 5

Run at the boil for 90 minutes.

6. Complete stripping-off disperse dyestuffs

AVCO-CAR NTO 3 - 6 g/l

Caustic Soda (50%) 3 - 4 cc/l

Sodium hydrosulfite 3 - 4 g/l

Run for 45 - 60 minutes at 120 – 130°C.

7. Optical brightening of polyester fibres

The addition of 2 - 4 g/l of AVCO-CAR NTO to the optical brightener bath at the boil, produces a marked improvement of the brightening effect.

8. Jig dyeing of polyester fabrics

Adjust to pH 4.5 – 5

Set bath at the boil.

Add over 2 ends the following:

AVCO-CAR NTO 3 - 8 g/l

AVCO-DISPERSANT NS 1 - 2 g/l

Add disperse dyes over 2 – 4 ends.

Run additional 4 ends at the boil.

Rinse hot at 80 c.