

SYNTHOSPIN™ P-10

CHARACTERISTICS

- A highly concentrated liquid
- An extremely effective nonionic antistatic non-yellowing agent
- As little as 0.125% of actual **SYNTHOSPIN™ P-10** on weight of fabric(owf) is required on application.
- Least critical to gumming, particularly on 100% polyesters and blends, especially during spinning.
- Most versatile on all synthetics (Polyester, Acrylics, modacrylics, Rayons, Acetates, Polypropylene & Nylon), Cotton, and Worsted & Modified Wool.
- Readily soluble in water in any proportions to produce an opalescent solution and is easily scoured
- An excellent tint dispersant
- Does not adversely affect lacquers on bobbins (for identification)
- Will not act as a "paint remover" on metal parts.
- Non-crocking, particularly on stock-dyed or top-dyed polyesters.

SPECIFICATIONS

Appearance	- Light amber, clear oily liquid
Solubility	- Clearly soluble in water--all dilutions
pH (2% solution)	- 7.0 to 8.8
Density	- 8.6 lbs/gallon
Viscosity	- 235-245 seconds Saybolt at 100°F
Flash Point	- 375°F(open cup)

APPLICATIONS

COTTON SYSTEM

Since **SYNTHOSPIN™ P-10** is least critical to gumming or loading of the cards, particularly on 100% polyesters and blends thereof; does not cause roll lapping.

We suggest initially in progressing 100% polyesters, that 0.175% to 0.20% be applied owf from a 1:9 cut in water at the opening hopper with or without tint.

With difficult blends, such as dope-dyed or stock-dyed modacrylic/polyester, use 0.2% add-on owf from a 1:9 cut in water. This aids appreciably in reducing carding fly and drop-out from a more compact lap and reduce shedding during spinning.

Mills using lacquer for bobbin identification indicate that **SYNTHOSPIN™ P-10** does not cause softening of this material or sticking to the cans during coiling.

WORSTED SYSTEM

Tow Conversion

Mills who convert particularly Polyester(Dacrons*), Rayon, Acrylics, Modacrylic (Dynel**) tow, who had problems with too gummy an antistat and could not easily draft or cut the tow, indicate that with the use of **SYNTHOSPIN™ P-10** has virtually eliminated their problems.

Generally 0.25% - 0.5% application owf either neat or in a 1:4 cut in water is recommended to be applied at the crimper roll, the lower percentage (0.25%) should be considered initially. We suggest on coarser deniers (up to 40D and 50D) the addition of our cohesive agent, **SPINRITE™** to the **SYNTHOSPIN™ P-10 HNF** (1:2/1:4 ratio).

Spinning

During gilling about 0.25% add-on o.w.f. of **SYNTHOSPIN™ P-10** is recommended either neat or from a 1:4 cut in water, particularly on 100% Dacron, Dacron/Wool blends, or Dacron/Mohair blends.

Top Dyeing

Generally, at the backwasher **SYNTHOSPIN™ P-10** is sprayed either neat or in a 1:4 cut in water at a 0.25% add-on owf.

SYNTHOSPIN™ P-10 HNF will withstand temperatures in the area of 350°F without volatilization or decomposition. We have been complimented on the superior drafting (sliding of fibers) and softer and more desirable properties on 100% Dacron* Dyed Top (black in particular).

Needle Felts (Non-Wovens)

Generally, 0.2% to 0.25% of **SYNTHOSPIN™ P-10** with or without 0.2% to 0.25% of **SPINRITE™** depending on the fiber blend supplies the necessary static protection, lubricity, yields and web cohesion.

Sliver-to-Knit

We find excellent results with the use of **SYNTHOSPIN™ P-10** in conjunction with our cohesive agents **LENOSPIN™ SDS CONC** and **SPINRITE™** on 100% Acrylic or blends thereof with modacrylics, 100% Polyester, and solution-dyed polypropylene with blends of polyesters.

Generally, on 100% Polyester or blends, use:

0.25% **SYNTHOSPIN™ P-10**

0.25% **LENOSPIN™ SDS CONC** (or **SPINRITE™**)



On 100% Acrylics or blends with modacrylics, use:

0.25% to 0.5% **SYNTHOSPIN™ P-10**

0.25% TO 0.5% **LENOSPIN™ SDS CONC** (or **SPINRITE™**)

ALL WITH 7% TO 10% OF MOISTURE.

Resin applications

SYNTHOSPIN™ P-10 may be used to control static in resin coating systems. Typical applications would utilize 1-3% on weight of the resin system used.

*Approved by E.I. DuPont de Nemours & Co., Inc.

**Union Carbide Corporation