***TECHNICAL BULLETIN***
***Textile Processing Compound***

**Let You LEAD The Process**

**E-mail : contact@nestorindustries.com**

# Nestogen - AST

*Hydrophilic Soil Release / Antistatic Agent*

***Nestogen - AST*** is a hydrophilic polymer that can be applied on polyester fibre or fabric during processing.

There are two ways of imparting an antistatic finish. One method is to incorporate an antistat in melt spinning itself to produce a wash fast effect and the second method is to apply an antistatic agent during finishing. The second method is more commonly used.

Antistatic agents mainly work by dissipating charge built up on the fabric. This effect is not a permanent one and results in reduced effectiveness over a period of time.

Hydrophilicization of polyester is a more long-term solution to eliminating these inherent problems of polyester as it not only dissipates static charges but prevents them from forming in the surface in the first place.

It also increases the wetting area by promoting a wicking action on surface. This imparts a SOIL RELEASE effect that counteracts the oil loving nature of polyester and prevents stain deposition. It also increases the contact angle between water and polyester allowing soils and stains to be released from the fibre surface.

***Nestogen - AST*** when applied on polyester forms a durable polymer film that interacts readily with water imparting a hydrophilic finish. This polymer absorbs moisture from the atmosphere that does not allow static charges to build up on the polyester. This durable treatment imparts the following properties:

- Inhibits formation of Static charge
- Enhances wearer comfort drastically
- Improves wetting action of polyester
- SOIL RELEASE effect: This Makes polyester extremely easy to clean by releasing oil based stains and soils and preventing deposition of stains.

***Nestogen - AST*** Copolymer is a durable textile finish softener for polyester yarns and fabrics. It imparts soil-release, lubricity, antistatic properties and increased moisture absorbency to polyester fabrics.

It is particularly effective on knit fabrics made from polyester yarns.

**PHYSICAL & CHEMICAL PROPERTIES**

| | | |
|---|---|---|
| Type | : | Nonionic |
| Chemical Nature | : | Hydrophilic Polymer |
| Appearance | : | Liquid, White dispersion |
| pH | : | Approx 6.5 |
| Solubility | : | Cold water dilutable in any ratio |
| Compatibility | : | Stable to anionic, cationic, and nonionic additives |
| Storage | : | Stable under normal conditions |

**The product appearance varies from batch to batch. The colour & viscosity may vary from batch to batch and its intensity is not an indication of product strength**.

## APPLICATION

### A. By Exhaust (Yarn, Fabric & Garment)

Set bath at 40 °C & pH : 5 - 6 with acetic acid

Add ***Nestogen - AST*** : 3- 4% owf

Raise temperature to 60- 80° C & run 20-30 minutes

Dry the yarn/fabric/garment below 150° C

### B. HPHT dyeing (Yarn & Fabric)

The preferred method of applying the product is during high temperature dyeing with virtually no change in normal dyeing procedure.

Set bath at 40° C & pH: 5- 6 with acetic acid

Add ***Nestogen - AST*** : 3- 4% owf

Raise temperature to 60 – 65 °C

Add disperse dye stuff before reaching 80 °C

Keep the temperature at 80° C for 10-15 min for good exhaustion

Continue with usual dyeing process

When dyeing heavy shades, Raise temperature to 60° C and hold for 45 minutes, add dyestuffs and continue with usual dyeing process.

### Application Notes

Avoid drying temperature above 176 °C.

Avoid bath pH >8.0

Avoid Adding ***Nestogen - AST*** Copolymer after electrolytes or resins are in the mixing tank

**The product appearance varies from batch to batch. The colour & viscosity may vary from batch to batch and its intensity is not an indication of product strength**.



Head Office Address: Plot No – 538, GIDC, Pandesara, Surat – 394221
Contact No. - +91 8306083020, +91 9377781836 || Website : www.nestorindustries.com