### **Product Name: Antree Silk Softener**

### **Main Components**

Amine- and hydroxyl-modified organosilicon emulsion.

#### **General Properties**

- Appearance: Pale white semi-transparent emulsion
- Solid Content (%): 18.0-20.0
- pH Value (1% aqueous solution): 6.0-8.0
- Ionic Nature: Anionic

#### **Product Features**

- 1. Strong affinity for polyester and other fabrics, providing a smooth, soft, and resilient texture with good breathability and wrinkle recovery.
- Excellent darkening effect on dark fabrics.
- 3. Strong affinity for silk, imparting a smooth hand feel and increasing the strength of silk fibers, lengthening long fibers, and reducing short fibers, thereby increasing the utilization rate (yield) of silk raw materials by 3-7%, without significantly affecting the residual oil rate.

# **Application Range**

Suitable for imparting a smooth hand feel to silk.

## **Usage Method**

#### 1. For silk finishing:

Dosage: 4-8% (o.w.f)

o pH Value: 5-6

Temperature: Around 40°C

Time: About 1 hour

○ Process: Thoroughly rinse refined silk raw materials (wash with hot water, then cold water) to remove residual alkali and dehydrate for use. Add an appropriate amount of water to the softening bath (tank) → adjust pH with acetic acid → add TF-404A and stir evenly → add refined raw materials.

#### 2. For polyester finishing:

- Can be done by conventional processes, such as one dip and one pad or two dips and two pads. Pre-dry at 100°C, then bake at 130-180°C for 30 seconds. The usual dosage is 10-20g/L.
- Specific processes should be adjusted based on trial samples.

#### **Precautions**

- Improper storage or use may cause stratification or oil separation.
- Avoid using poor-quality water (e.g., with hardness above 100 ppm as CaCO<sub>3</sub>) for dilution to prevent adverse effects on finishing quality.

# **Packaging and Storage**

50 kg plastic drum, sealed and stored away from light. Shelf life of 12 months at room temperature. Avoid prolonged exposure to extreme heat or cold, which can cause oil separation and stratification.

#### Disclaimer

This information is based on Antree Technology's research and is currently confirmed to be correct. Any technical advice provided by the company, whether orally or in writing, is given in good faith. However, users are responsible for testing the suitability of the company's products for their specific process conditions, as the company's control over users' processing conditions is limited. The company only guarantees that the products meet the specifications and consistency of the product.