TUSI HAYTHAM BIO LIMITED
Chemistry for a Greener Planet

# Technical Data Sheet

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**SOFISIL™ Series – SOFISIL SS 360**

**Hydrophobic Silicon Softener – Nano Hydrophobic Silicone**
**Manufacturer: Tusi Haytham Bio Limited**

**Product Description:**

**SOFISIL SS 360 is a nano hydrophobic silicone-based textile softener designed to provide ultra-fine water repellency, superior softness, and exceptional smoothness.**
**It forms a uniform nano-scale hydrophobic layer on fabric surfaces, offering enhanced water repellency, improved fabric drape, and luxurious hand feel.**
**Ideal for cotton, polyester, blended fabrics, and high-performance textiles, it is suitable for soft finishing, water-repellent treatments, and premium textile applications.**

**Key Performance Properties:**

- **Provides excellent nano-scale hydrophobicity and water repellency.**
- **Imparts soft, smooth, and luxurious hand feel.**
- **Reduces surface friction and improves fabric drape.**
- **Compatible with most textile auxiliaries and finishing processes.**
- **Maintains performance and water repellency after repeated washing.**

**Typical Properties:**

| Property | Specification |
|---|---|
| Appearance | Milky white liquid |
| pH (25 °C) | 5.0 – 7.5 |
| Ionic Nature | Nonionic / Nano Hydrophobic Silicone |
| Solubility | Dispersible in water; forms stable emulsion |
| Specific Gravity (25 °C) | 0.97 ± 0.02 |
| Stability | Stable under normal textile processing conditions |

**Application:**

- **Apply SOFISIL SS 360 in softening or finishing baths, or via pad-dry-cure method.**
- **Typical dosage: 0.3 – 2.0 % owf, depending on fabric type and desired hydrophobic effect.**
- **Ensure uniform distribution by stirring or padding.**
- **Compatible with other finishing auxiliaries; optimize processing parameters through lab trials.**

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**Precautions:**

- **Avoid direct contact with eyes and skin; wear protective gloves and goggles.**
- **Do not mix with strong acids, oxidizers, or incompatible chemicals in concentrated form.**
- **Store in tightly sealed containers in a cool, dry place.**

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**Packing Size:**

**Available in 25 kg, 60 kg, and 120 kg HDPE drums.**

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**Storage:**

- **Store in a cool, dry, ventilated area below 40 °C.**
- **Shelf life: 12 months from the date of manufacture in unopened containers.**
- **Check product label for “Best use before end” date.**

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**Issued by:**

**Tusi Haytham Bio Limited – Technical Division**
**Product: SOFISIL™ Series – SOFISIL SS 360**
**Category: Hydrophobic Silicon Softener – Nano Hydrophobic Silicone**