TUSI HAYTHAM BIO LIMITED
Chemistry for a Greener Planet

Technical Data Sheet

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LYCRASHIELD™ Series – LYCRASHIELD PRO
Lycra Protector – Elastane / Stretch Fabric Care

Manufacturer: Tusi Haytham Bio Limited

Product Description:
LYCRASHIELD PRO is a high-performance lycra protector designed to prevent lycra (elastane) degradation and "out problem" in stretch fabrics. It protects the elastane fibers during textile processing, finishing, and washing, ensuring elasticity retention, shape stability, and long-lasting performance. Ideal for garments, activewear, hosiery, and stretch fabric applications.

Key Performance Properties:

- **Prevents lycra/elastane degradation and loss of elasticity.**
- **Maintains fabric shape, stretch, and recovery.**
- **Enhances durability and performance of stretch fabrics.**
- **Compatible with common textile auxiliaries and finishing processes.**
- **Easy to apply in padding, coating, or exhaust processes.**

Typical Properties:

Property	Specification
Appearance	Clear to pale yellow liquid
Solid Content	10 – 20 %
pH (25 °C)	5.0 – 7.0
Viscosity (25 °C)	100 – 300 mPa·s
Solubility	Fully miscible in water
Stability	Stable under normal storage and processing conditions

Application:

- **Apply LYCRASHIELD PRO via padding, coating, or exhaust processes on lycra-containing fabrics.**
- **Typical pickup: 1 – 5 % owf depending on fabric composition and desired protection.**
- **Dry or cure according to process requirements to ensure optimal protection.**
- **Compatible with softeners, dyes, and other finishing auxiliaries; optimize via lab trials.**

Precautions:

- **Avoid direct contact with eyes and skin; wear protective gloves and eyewear.**
- **Do not mix with strong acids or oxidizing agents without dilution.**
- **Store in tightly sealed containers to maintain product quality.**

Packing Size:
Available in 25 kg, 60 kg, and 200 kg HDPE drums.

Storage:

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

Issued by:
Tusi Haytham Bio Limited – Technical Division
Product: LYCRASHIELD™ Series – LYCRASHIELD PRO
Category: Lycra Protector – Stretch Fabric Care