TUSI HAYTHAM BIO LIMITED
Chemistry for a Greener Planet

Technical Data Sheet

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FIBROCEL™ Series – Fibrocel BIO
Bio Stoning Enzyme – Denim & Garment Finishing

Manufacturer: Tusi Haytham Bio Limited

Product Description:
Fibrocel BIO is a high-performance bio-stoning enzyme designed for garment and denim finishing. It delivers a soft hand, vintage or worn-out appearance, and fabric smoothness while minimizing yarn and fiber loss. Ideal for cotton and cotton-blended denim, it ensures consistent and controlled enzyme washing effects.

Key Performance Properties:

- **Produces soft handfeel and smooth fabric surface.**
- **Provides a vintage, stonewashed look without mechanical abrasion.**
- **Minimizes fiber/yarn damage during denim finishing.**
- **Compatible with other garment finishing auxiliaries.**
- **Suitable for enzyme washing of denim and garments.**

Typical Properties:

Property	Specification
Appearance	Light brown liquid
Enzyme Activity ≥ 1000 U/g (specific activity may vary by batch)	
pH (25 °C)	5.5 – 6.5
Stability	Stable under recommended storage and processing conditions
Solubility	Fully miscible in water

Application:

- **Prepare an aqueous solution of Fibrocel BIO at 0.5 – 2 % owf depending on fabric type and desired vintage effect.**
- **Treat fabrics at 40 – 60 °C for 30 – 60 minutes.**
- **Rinse thoroughly after treatment to remove residual enzyme.**
- **Optimize dosage, temperature, and time via lab trials to achieve the desired soft hand and vintage look while minimizing yarn loss.**

Precautions:

- **Avoid direct contact with eyes and skin; wear protective gloves and eyewear.**
- **Store away from oxidizing agents, high temperatures, and direct sunlight.**
- **Handle with care to prevent enzyme inactivation.**

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

Storage:

- **Store in a cool, dry, ventilated area below 25 °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
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Category: Bio Stoning Enzyme – Denim & Garment Finishing