TUSI HAYTHAM BIO LIMITED
Chemistry for a Greener Planet

Technical Data Sheet

Date 23.10.2025 Version: thbl-01

FIBROCEL™ Series – Fibrocel AE
Acid Enzyme – Textile Finishing Applications

Manufacturer: Tusi Haytham Bio Limited

Product Description:
Fibrocel AE is a high-performance acid enzyme specially formulated for textile finishing. It reduces pilling, improves fabric handfeel, and smoothens fabrics in acidic medium while minimizing yarn loss. Ideal for cotton, blended, and delicate fabrics, it ensures superior softness and surface quality during finishing processes.

Key Performance Properties:

- **Reduces fabric pilling and fuzziness.**
- **Improves softness, handfeel, and drapability.**
- **Smoothens fabric surface with minimal fiber/yarn damage.**
- **Operates effectively in acidic conditions.**
- **Compatible with common textile auxiliaries in finishing processes.**

Typical Properties:

Property	Specification
Appearance	Light brown liquid
Enzyme Activity	≥ 1000 U/g (specific activity may vary by batch)
pH (25 °C)	4.5 – 5.5
Stability	Stable under recommended storage and processing conditions
Solubility	Fully miscible in water

Application:

- **Prepare an aqueous solution of Fibrocel AE at 0.5 – 2 % owf depending on fabric type and desired effect.**
- **Treat fabrics at 40 – 60 °C in acidic pH (4.5 – 5.5) for 30 – 60 minutes.**
- **Rinse thoroughly after treatment to remove residual enzyme.**
- **Adjust dosage, temperature, and treatment time based on lab trials for optimal softness and minimal 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
Product: FIBROCEL™ Series – Fibrocel AE
Category: Acid Enzyme – Textile Finishing Applications