



NOVOZYMES **CELLUSOFT[®] LT**

– Bring colors to life with low-temperature biopolishing

Consumers today don't settle for good quality textiles. They want great quality: Clothes that last longer without losing their new appearance. In the end, that means retailers are demanding more of their suppliers. Whether you are producing or washing textiles, you can now get the best solution for value-adding quality textiles in the market.

Quality starts with biopolishing

Enzymatic biopolishing is the process that removes dead cotton and protruding fibers from the fabric surface to give a great appearance and to avoid fuzz and pills from forming after wash and wear. Cellusoft[®] LT is the true low-temperature solution that provides smoother, softer and stronger fabrics that retain their vibrant colors and high quality wash after wash.

Low temperature, high color retention

Cellusoft[®] LT is a robust enzyme that works at a pH range of 5.5-8.0 and at temperatures as low as 30-40°C – the gentlest processing conditions fabrics could ask for. In turn, under these conditions, you get low weight and tensile strength loss plus the best color and whiteness retention available today. Overall, garments become more durable over time – just like consumers are demanding.

Cellusoft® LT 19500 shows superior performance across a range of parameters

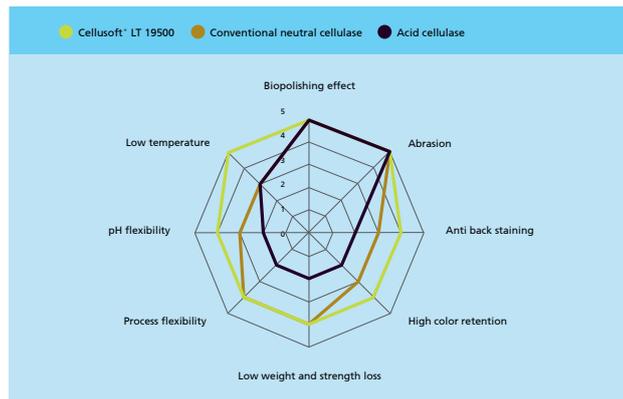


Fig 1. The performance of Cellusoft® LT 19500 compared to conventional neutral and acid cellulase.

Cellusoft® LT 19500 works at a broad range of low temperatures

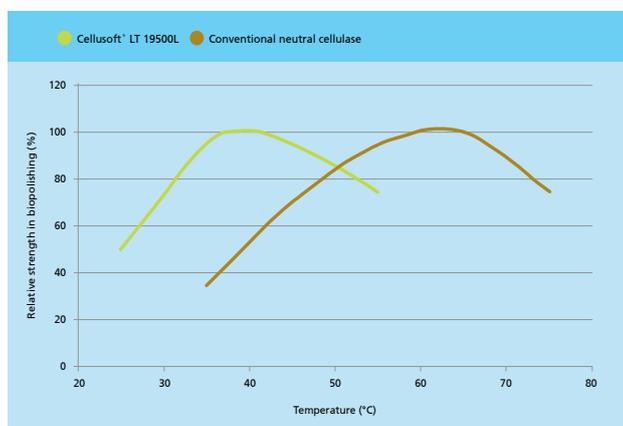


Fig. 2. The temperature range of Cellusoft® LT 19500 compared to conventional neutral cellulase at a pH of 6.5.

Cellusoft® LT 19500 performs at a flexible broad pH range

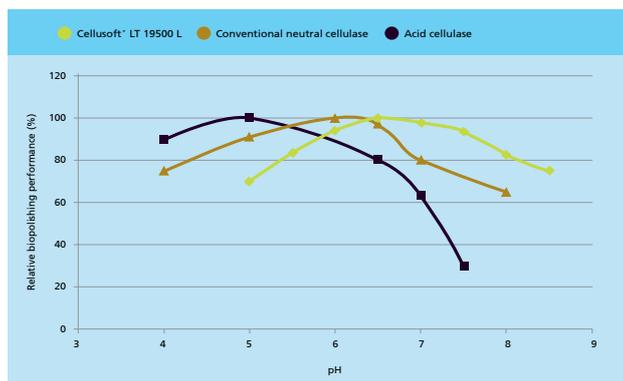


Fig. 3. The pH range of Cellusoft® LT 19500 compared to conventional neutral cellulase and acid cellulase.

Flexible processing

Cellusoft® LT can be used for biopolishing before, during and after dyeing in a low-temperature biopolishing step. In processes where fabrics are pre-bleached, Cellusoft® LT works with a catalase in a combined process of bleach removal, biopolishing and reactive dyeing. It is particularly suitable for processes where dyeing starts at low temperatures.

In garment dyeing and other processes where bleach removal is not required, Cellusoft® LT can simply be added to the reactive dyebath before adding alkali. When used after dyeing, the enzyme achieves the best whiteness and color retention possible using less energy and time.

Cellusoft® LT is also suitable for removing pills from denim and retaining the real indigo blue for a brilliant denim look.

Whatever your low-temperature biopolishing process, Cellusoft® LT ensures superior biopolishing, and takes color radiance and durability to the next level.



Novozymes is the world leader in bioinnovation. Together with customers across a broad array of industries we create tomorrow's industrial biosolutions, improving our customers' business and the use of our planet's resources.

For more information visit www.novozymes.com

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