**DESIZING**
OptiSize® and PrimaGreen® alpha-amylase enzymes break down starch and are highly effective for desizing woven fabrics and garments. OptiSize® and PrimaGreen® alpha-amylase product line enable textile fabric and garment processors to achieve highest performance across a wide pH and temperature range and in all application conditions.

- **PrimaGreen® ALL**
  Desizing enzyme in concentrated liquid form. Effective for low to medium-high temperature desizing over a wide pH-range. PrimaGreen® ALL can be used in cold pad batch, hot pad batch and jigger desizing processes.

- **OptiSize® NEXT**
  Desizing enzyme in concentrated liquid form. Effective for high temperature desizing over a wide pH-range. OptiSize® NEXT is highly effective in jigger and pad steaming processes.

**BIOSCOURING**
PrimaGreen® pectate lyase enzymes represent the latest innovation for low to medium temperature scouring at neutral pH, enabling significant reductions in water and energy usage.

- **PrimaGreen® EcoScour**

**PEROXIDE CLEAN-UP**
PrimaGreen® catalase enzymes promote effective peroxide removal even under the most stringent processing conditions. Traditional methods of removing residual peroxide after bleaching involve multiple water rinses or chemicals such as sodium bisulfite. PrimaGreen® catalases decompose hydrogen peroxide into its natural components, water and oxygen. PrimaGreen® Oxy catalase provides reliable and complete peroxide removal ensuring a more consistent dyeing result.

- **PrimaGreen® Oxy**
  Highly concentrated liquid catalase formulation designed to quickly remove the peroxide in the first rinse after bleaching, saving subsequent water rinse steps, energy, and time. PrimaGreen® Oxy has excellent stability in the presence of high peroxide concentrations. PrimaGreen® Oxy also has superior stability compared to other peroxide-degrading enzymes due to its high activity over a wide pH and temperature range.

**FABRIC BIOFINISHING**
Primafast® cellulase enzymes are highly effective for fabric biofinishing at acid and neutral pH conditions to reduce pilling and create a higher quality surface by removing the fibrils that make fabric surfaces rough or fuzzy. These Primafast® cellulase enzymes can elevate the performance of lower quality cotton fabrics by producing a cleaner and smoother surface, softer hand-feel, and improved fabric drape that lasts longer.

- **Primafast® GOLD HSL**
  Highly concentrated liquid preparation for biofinishing: surface defibrillation, depilling, pill prevention and softening on a variety of cotton based fabrics. This unique enzyme gives superior fabric cleanup under neutral pH conditions in all types of processing equipment. Cleanup under neutral pH allows the possibility to combine biofinishing and dyeing in a single bath process.

- **Primafast® LUNA CL PLUS**
  Highly concentrated liquid preparation for biofinishing. Biofinishing with Primafast® LUNA CL PLUS preserves higher fabric strength and gives better color retention compared to conventional enzymes. Ideal for treatment before or after the dyeing process.

- **Primafast® LMA 400**
  Concentrated liquid enzyme for biofinishing. All-round clean-up product and suitable for treatment before or after the dyeing process.

- **Primafast® 200**
  Concentrated liquid enzyme for biofinishing. Aggressive clean-up and colorpull characteristics so for treatment before the dyeing process at acid pH conditions. Effective for biofinishing under low to high abrasion levels and under low operating temperatures.
GARMENT ABRASION

IndiAge® cellulase enzymes are perfect for creating the stonewashed looks of indigo-dyed denim, which can help eliminate the use of actual stones. IndiAge® enzymes work on the surface fibers of denim, exposing the white core of the ring-dyed yarns. In addition to producing a fashionable look and feel, enzymatic fading of denim causes less environmental impact compared to pumice stones derived from mining which then cause damage to garments and equipment.

- **IndiAge® Super L**
  Concentrated liquid enzyme for denim stonewashing. Suited for high contrast denim finishing with low back-staining. Can deliver low-to-high abrasion levels at mild operating temperatures. Also available in solid granular form as IndiAge® Super GX Plus.

GARMENT FADING

PrimaGreen® fading enzyme systems can be used to alter the color and shade of indigo and sulfur dyed fabrics. This enzymatic approach can create new fashion possibilities from cast adjustment and shade change to bleaching without the use of chlorine or permanganate which can be problematic due to their negative impacts on health, safety and environment.

- **PrimaGreen® EcoLight 1**
  Sulphur dye fading enzyme in a ready-to-use liquid preparation. The EcoLight system delivers just the right amount of fading effect in a controlled release during the washing process. Unlike other fading techniques the EcoLight fading system is easy to control and it is highly reproducible. Sulphur dye is gradually altered to the shade you want without fabric damage. Can be combined sequentially with IndiAge® stonewashing in a single bath.

- **PrimaGreen® EcoFade LT100**
  Indigo dye fading enzyme in a ready-to-use dry formulation. This robust enzyme delivers shade adjustment of indigo dyed denim garments without fabric strength loss and in one wash cycle due to its excellent activity retention over a period of time, which no other fading enzyme can deliver. Designed to perform at low temperature without pH adjustment which makes this product superior and unique. Can be combined with IndiAge® stonewashing in a single bath.

CONTACT INFORMATION

**NORTH AMERICA**
Rochester, New York (USA)
Tel.: +1 800 847 5311
Fax.: +1 585 256 5295

**EUROPE, MIDDLE EAST & AFRICA**
Leiden, The Netherlands
Tel.: +31 71 5686 168
Fax.: +31 71 5686 169

**LATIN AMERICA**
Buenos Aires, Argentina
Tel.: +54 11 4021 4700
Fax.: +54 11 4021 4800

For more information and to contact us, please visit: primagreen.dupont.com

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