**CONSTITUTION**
Blend of whole cellulases

**APPEARANCE**
Dark brown liquid

**MISCIBILITY**
Miscible in water

**COMPATIBILITY**
Compatible with nonionic products

**HIGHLIGHTS**
- Special Trichoderma cellulase with high filter paper activity
- Hydrolyses the cellulose on the surface of the fabric
- Acts only on crystalline regions ensuring minimum colour loss
- Imparts soft feel to the fabric
- Gives clean surface to the fabric
- Improves drapability of the garments
- Operates at 55°C temperature and pH range of 4.5 – 5.0
- Ecofriendly operation

**APPLICATION**
Due to the ring dyeing of warp yarn of denim a faded fashionable look is obtained. These types of wash down effects are created due to the removal of dyes by abrasion on the garments. Wash down effect are achieved due to bio abrasion where the enzymes act on cellulose and by hydrolyzing it gives the desired look.

**BIOFAST 50 LIQUID** attack the amorphous regions producing better cutting, good puckering effects but with higher back staining compared neutral or engineered cellulases.

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### Effect of application parameters on activity of BIOFAST 50 LIQUID

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>80°C</td>
<td>120</td>
</tr>
<tr>
<td>70°C</td>
<td>100</td>
</tr>
<tr>
<td>60°C</td>
<td>80</td>
</tr>
<tr>
<td>50°C</td>
<td>60</td>
</tr>
<tr>
<td>40°C</td>
<td>40</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>pH</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>5.5</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>4.5</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>80</td>
</tr>
</tbody>
</table>

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**TS/ 134/Rev 00**

**BIOFAST 50 LIQUID**

Acid cellulase enzyme for biopolishing with minimum colour loss

**July 2011**
GUIDELINES

BIO POLISHING
- Add water
- Load the machine
- Raise temperature to 55°C and adjust pH to 4.5-4.8
- Add
  - Kleenox PSF Liquid 0.5-1.0 gms/lit
  - BIOFAST 50 LIQUID 0.5-0.8 %
- Run the machine for required time i.e. between 45-60 mins
- Drain
- Hot rinse with
  - Greenpol A Liquid 1.0 – 2.0 gms/lit at 80°C and pH 8-9
- Rinse
- Drain

STORAGE
BIOFAST 50 LIQUID has to be stored in an air-tight, cool & dry place, away from direct heat and sunlight

PACKING
BIOFAST 50 LIQUID is available in 20kg (4 x 5 Kg.) packs and 30/50 Kg. (30/50 Kg x 1) packs to suit customers requirements