



**DYADIC INTERNATIONAL (USA), INC.**  
140 INTRACOASTAL POINT DRIVE, SUITE 404  
JUPITER, FLORIDA 33477-5094 USA  
561.743.8333 TEL  
561.743.8343 FAX  
<http://www.dyadic.com>

## **ROCKSOFT™ BioACE 200**

### **Product #113**

(For considerations in **Biofinishing** Applications)

#### **I. INTRODUCTION:**

**ROCKSOFT™ BioACE 200** is a liquid acid cellulase enzyme that can effectively be used for biofinishing of cellulosic fabrics. **ROCKSOFT™ BioACE 200** is designed for use in biofinishing of all cellulosic fabrics including, but not limited to, cotton, rayon, linen, flax, ramie, and Tencel®.

#### **II. PHYSICAL PROPERTIES:**

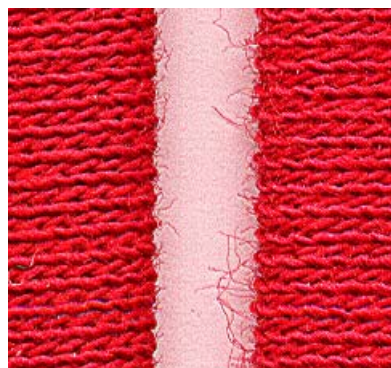
Appearance: Medium to dark amber liquid (Note that color does not affect or reflect activity.)  
Odor: Slight fermentation odor  
pH (as is): 4.5 – 4.9  
Density: 1.20 – 1.30  
Activity: 2,500 – 3,000 DTU/g

Activity is based on an internal standard and should not be used to compare to other products with different activity units or products with different enzyme components with the same activity units. The activity reported with each lot should only be used to confirm consistency from lot to lot.

#### **III. PRODUCT CAPABILITIES:**

When run as directed in this bulletin, **ROCKSOFT™ BioACE 200** can be utilized to accomplish the following:

1. Reduce the fuzz and pilling, soften and smooth the hand, and increase the gloss/luster and yield a fuller, deeper color by the biofinishing of garments before or during the garment dyeing cycle.
2. Significantly soften 100% cotton fabrics, both woven and knits.
3. Appreciably remove the fuzz and cotton pill balls from garments, sweaters, socks and others as a result of long wet processing or garment dyeing cycles.
4. Biofinishing may be performed in either semi-continuous or batch process.



**ROCKSOFT™ BioACE 200** (left) versus competitive acid cellulase (right) at equivalent dosage, time and temperature.

#### **IV. PROCESSING CONDITIONS: GENERAL:**

**ROCKSOFT™ BioACE 200** will function from a pH of 4.5 to 5.5 with pH 4.8 as an optimum. Acetic acid based pH controls are preferred over citric or phosphate. **ROCKSOFT™ BioACE 200** will function from 40°C – 60°C (104°F – 140°F).

#### **V. RECOMMENDATIONS FOR USAGE:**

##### **Biofinishing/Fuzz Removal:**

Liquor to goods ratio: 8:1-15:1, pH: 4.8 (with acetic acid or buffer)  
Temperature: 50°C – 60°C (120°F – 140°F), dosage: 0.25 – 2.0% owg  
Time: 20 – 45 minutes depending on desired effect

##### **Process Control:**

Biofinishing is normally controlled by monitoring the weight loss of the fabric. A weight loss of 3–5% usually reflects a good biofinishing effect without excessive loss of fabric strength.

Higher temperatures, closer to 60°C, are more effective than lower temperatures, but lower temperatures may still give an acceptable biofinishing effect.

##### **Denim Washing:**

**ROCKSOFT™ BioACE 200** may also be used in denim washing at 0.25-0.75% owg at pH 4.8, 50°C – 60°C, 30 – 45 minutes.

#### **VI. STORAGE CONDITIONS/ACTIVITY:**

**ROCKSOFT™ BioACE 200** retains more than 90% activity after four months when stored at 25°C (77°F) out of direct sunlight and in the original, closed container. **ROCKSOFT™ BioACE 200** also retains more than 90% activity after 1 month when stored at 38°C (100°F). Do not let freeze.

#### **VII. INACTIVATION:**

**ROCKSOFT™ BioACE 200** can be inactivated by raising the pH above 11 or temperature above 71°C (160°F) or a combination of the two. After the desired effect has been achieved, we recommend inactivating **ROCKSOFT™ BioACE 200** within the next operating bath.

#### **VIII. PACKAGING:**

**ROCKSOFT™ BioACE 200** is packaged in 220 kg polyethylene drums.

#### **IX. TECHNICAL SERVICE:**

Information covering specific applications for this product is available from your Dyadic International (USA) sales/technical representative. We will work with you to enhance processes and solve problems, in addition to assisting you in achieving the end result/look desired. Call your sales/technical representative for any questions, comments, or help that you need!

Nothing disclosed is to be construed as a recommendation to use our products in violation of any patents. The information presented is believed to be accurate. However, said information and products are offered without warranty or guarantee, except as to the composition and purity stated herein since the ultimate conditions of use and variability of the materials treated is beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale. The goods described herein are sold as is and with all faults. The seller specifically disclaims all warranties in connection with the sale of the goods, both express and implied, including, without limitation, the warranties of merchantability and fitness for any particular purpose, as those terms are defined in the Uniform Commercial Code of Florida. The seller shall not be liable for any incidental or consequential damages whatsoever.

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