



DYADIC INTERNATIONAL, INC.  
140 INTRACOASTAL POINT DRIVE, SUITE 404  
JUPITER, FLORIDA 33477  
(561) 743-8333  
(561) 743-8343 fax  
<http://www.dyadic-group.com>

# ROCKSOFT™ULTRA POWDER

## Product #145

(FOR FORMULATION PURPOSES ONLY.)

### I. INTRODUCTION:

**ROCKSOFT™ULTRA POWDER** is a powdered acid cellulase specifically designed to give less backstaining than traditional acid cellulases in denim washing applications. **ROCKSOFT™ULTRA POWDER** has a wide operating range and may be run from pH 4.5 - 6.5 and temperature of 30°C (86°F) to 60°C (140°F). As the pH increases and the temperature decreases backstaining will decrease significantly. **ROCKSOFT™ULTRA POWDER** is almost 5 times the strength of our liquid acid cellulase, **ROCKSOFT™ULTRA L-1000**, and should be cut with a pH buffer, detergent, and any other desired additive to achieve similar performance as **ROCKSOFT™ULTRA L-1000**.

### II. PHYSICAL PROPERTIES:

Appearance: Tan to cream Powder (Note that color does not affect or reflect activity.)

Odor: Slight fermentation odor

pH (1% soln): 4.5± 1.0

Activity: >5,200 DTU/g

### III. PRODUCT CAPABILITIES:

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

1. Significantly soften 100% cotton fabrics, both woven and knits.
2. 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.
3. Increases the "stone wash" effect on rotary washed garments when using a significant amount of pumice stones and/or other abrasives.
4. Can desize TMKP sized fabrics alone and aids in desizing other sized fabrics when used in conjunction with a nonionic detergent or amylase.
5. May be used in pre-washing to further increase softening.

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

**ROCKSOFT™ULTRA POWDER** will function from a pH of 4.5 to 6.5 and will function from 30°C - 60°C (86°F - 140°F). The closer the operating parameters are kept to above recommendations, the better the utilization is of **ROCKSOFT™ULTRA POWDER**. The recommended liquor to goods ratio is 6:25:1 for stone wash applications and 7:1 to 8:1 for softening and fuzz removal.

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**ROCKSOFT™ULTRA POWDER** functions at a wide pH and temperature range. You will have the most activity from pH 4.5 to 5.0 and 60°C(140°F), so the typical cycle time would be 30 to 45 minutes, but, this would also give more backstaining. To reduce backstaining lower temperature to 50°C (122°F), increase pH 6.0 – 6.5 and increase time to 45 to 75 minutes to compensate for reduction of activity. You may also choose to run somewhere between pH 4.5 and 6.5 and between 37°C and 60°C to adjust to the look you require.

#### **V. RECOMMENDATIONS FOR FORMULATION:**

All percentages are on the total weight of the blended product.

Formulated products may contain the following components.

##### **ULTRA POWDER**

Adipic Acid

Trisodium Citrate (hydrated)

Monosodium Phosphate (MSP)

Disodium Phosphate (DSP)

Granulated Detergent, (granulated C12-14 linear nonionic alcohol eith EO mole 35 and up)

Abrasive (bone dry pumice or other abrasive like popped perlite.)

Wetter (Tergitol 15-S-9 or similar product with 100% solids and no water)

##### **Example formula when run at pH 5.0 and 60°C**

Adipic Acid	18.0%
Trisodium Citrate	36.0%
Perlite	5.0%
Detergent	15.0%
ULTRA POWDER	25.0%
Wetter	1.0%

##### **Example formula when run at pH 6.5 and 50°C**

MSP	49.1%
DSP	4.9%
Perlite	5.0%
Detergent	15.0%
ULTRA POWDER	25.0%
Wetter	1.0%

For extra protection against moisture regain add desiccant bag in packaging.

**VI. STORAGE CONDITIONS:**

**ROCKSOFT™ULTRA POWDER** 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™ULTRA POWDER** also retains more than 90% activity after 1 month when stored at 38°C (100 °F).

**VII. INACTIVATION:**

**ROCKSOFT™ULTRA POWDER** can be inactivated by raising the pH above 11.0 or use **DAD** at 2.0% OWG or temperature above 71°C (160°F) or a combination of the two. After the desired effect has been achieved, we recommend inactivating **ROCKSOFT™ULTRA POWDER** within the next operating bath.

**VIII. PACKAGING:**

**ROCKSOFT™ULTRA POWDER** is packaged in 75 kg fibre drums.

**IX. TECHNICAL SERVICE:**

Information covering specific applications for this product is available from your Dyadic International, Inc. 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 out 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.**