

# CERTIFICATE OF ANALYSIS

Product Description      CELLULASE  
   ONOZUKA R-10  
Product Number          C224  
Lot Number                11D0224022  
Storage Temperature    2-6 °C  
CAS Number               9012-54-8

## Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Soluble in Water @ 10 mg/mL	Passes
pH	Under Development	6.96
Physical Appearance Color*	2152-60 to 2154-60, 2152-70 to 2156-70, 2015-70 to 2017-70, 2153-50, HC-32, or HC-35	2153-60 Beige
Texture	Fine Powder; may form clumps	Fine Powder
Solution Appearance Clarity Color	Clear Slight Yellow to Beige Tint	Clear Slight Yellow Tint
Average Time to Dissolve	Within 5 min	Passes
Insolubles	None	Passes
Enzyme Activity	Minimum 10,000 units/g	Passes

\* Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color Preview™).

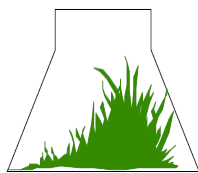
The material described in this certificate was manufactured in Japan and was derived solely from the fermentation of *Trichoderma viride*. The medium used to grow this fungus contained no animal-derived material; it was sterilized at 105-110° C for 70 minutes prior to fermentation. Lactose, purified from Bovine milk of US origin, was added to the final product to adjust the enzyme activity to meet specification.

**PhytoTechnology Laboratories® provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTechnology Laboratories® shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.**

Recommended Shelf Life Date: April 2016



Gary Seckinger, Ph.D.



PhytoTechnology  
Laboratories®  
Dedicated to Growth

### **PhytoTechnology Laboratories®**

Mailing Address: P.O. Box 12205, Shawnee Mission, KS 66282-2205  
Phone: 1-888-749-8682 (1-913-341-5343 *Outside the USA & Canada*)  
Fax: 1-888-449-8682 (1-913-341-5442 *Outside the USA & Canada*)  
Visit our Web Site at <http://www.phytotechlab.com>



Created on 29 April 2011 PN