CERTIFICATE OF ANALYSIS

Cellulase "Onozuka" R-10 from Trichoderma viride	**Cat.No.: 16419**
E.C. 3.2.1.4	**Contr.No.: 200872**

Parameter	Method	Specification	Result
Molecular weight		ca. 52 000	
Appearance		beige lyophilisate	corresponds
Activities (U/mg)	Cellulase	ca. 1	1.2
	Hemicellulase	ca. 1	corresponds
	Protease (DMC)	ca. 0.01	corresponds
	α-Amylase	ca. 0.8	corresponds
	Pectinase	ca. 0.4	corresponds
Minimum shelf life			24.08.2023
Storage (°C)			+2 to +8

Unit definitions

Cellulase
1 unit is the amount of enzymatic activity which catalyzes the liberation of 1 µmol glucose from sodium carboxymethyl cellulose per minute at 40°C, pH 4.5.

Hemicellulase
1 unit is the amount of enzymatic activity which liberates 1 µmol of reducing groups from beechwood xylan per hour at 37°C, pH 5.5, calculated as xylose.

Protease
1 DMC-unit is that amount of enzymatic activity which catalyzes the cleavage of 1 µequivalent peptide bond from dimethylcasein per minute at 25°C, pH 7.0, expressed in terms of the appearance of new terminal amino groups.

α-Amylase
1 unit is that amount of enzymatic activity which catalyzes the liberation of 1 µequivalent of reducing groups from soluble starch (Zulkowsky) per minute at 25°C, pH 6.0, calculated as maltose.

Pectinase
1 unit is that amount of enzymatic activity which catalyzes the liberation of 1 µmol of reducing groups from pectic acid per minute at 25°C, pH 4.5, calculated as D-galacturonic acid.

We do not guarantee that the product can be used for a special application.
This document does not release you from performing the standard control upon receipt of incoming goods.

SERVA Electrophoresis GmbH
Quality Control

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Daniela Lux-Helmstetter

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