

CERTIFICATE OF ANALYSIS

| Cellulase "Onozuka" R-10 from Trichoderma viride | Cat.No.: | 16419 |
|--|------------|--------|
| E.C. 3.2.1.4 | Contr.No.: | 160247 |

| Parameter | Method | Specification | Result |
|--------------------|--|--|---|
| Molecular weight | | ca. 52 000 | |
| Appearance | | beige lyophilisate | corresponds |
| Activities (U/mg) | Cellulase Hemicellulase Protease (DMC) α-Amylase Pectinase | ca. 1 ca. 1 ca. 0.01 ca. 0.8 ca. 0.4 | 1.1 corresponds corresponds corresponds corresponds |
| Minimum shelf life | | 6919 | 07.03.2019 |
| Storage (°C) | | de | +2 to +8 |

Unit definitions

Cellulase

1 unit is the amount of enzymatic activity which catalyzes the liberation of 1 μ mol 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 μ mol 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

Dipl.-Ing. (FH) Bernhard Göckel

Daniela Lux-Helmstetter

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