

# CERTIFICATE OF ANALYSIS

Macerozyme R-10 from Rhizopus sp.	Cat.No. :	28302
lyophil.	Contr.No.:	140436

Parameter	Method	Specification	Result
Appearance		pearl-white powder	corresponds
Solubility	1 mg/ml 0.1 M sodium acetate buffer, pH 4.5	clear and colorless	corresponds
Activities (U/mg)	Pectinase	ca. 0.5	0.59
	Cellulase	ca. 0.1	0.09
	Hemicellulase	ca. 0.25	0.19
Minimum shelf life	. Coll		04/2016
Storage (°C)			+2 to +8

## **Unit definition**

#### **Pectinase**

1 Unit is that amount of enzymatic activity which catalyzes the liberation of 1  $\mu$ mol of reducing groups from pectic acid per minute at 25°C, pH 4.5, calculated as D-galacturonic acid.

#### Cellulase

1 Unit is that 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 that 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.

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

**Printing date**: 10.04.2014