

Lactase L

β -D-Galactosidase, EC 3.2.1.23

Description: neutral yeast-lactase, splits lactose into their monosaccharides (glucose and galactose)

Origin: *Kluyveromyces lactis*

Application: splitting of lactose (milk sugar) in milk products for special products for humans with lactose incompatibility

Activity: > 45 000 U/ml

Parameters of reaction: pH optimum 6 - 7 active within pH 2.5 – 8.5
temperature optimum 45°C active within 15 – 70°C

Dosage: complete degradation of lactose in milk

0.6 g/ kg milk at 6 – 10°C within 24 h

0.5 g/ kg milk at 6 – 10°C within 48 h

0.3 g/ kg milk at 20°C within 48 h

Before application the product should be diluted with drinking water in ratio of 1:5. The required amount of enzyme is depending on temperature, pH-value and time of reaction (see below). It will be suggested to optimise the dosage according to the conditions of application.

Order-No.: 2050

Form of delivery: white-yellow liquid with typical odour

Storage: 6 – 8°C, protecting against light

Literature: 12 months under aforesaid conditions

Lactase L from *Kluyveromyces lactis* temperature /pH-value activity data

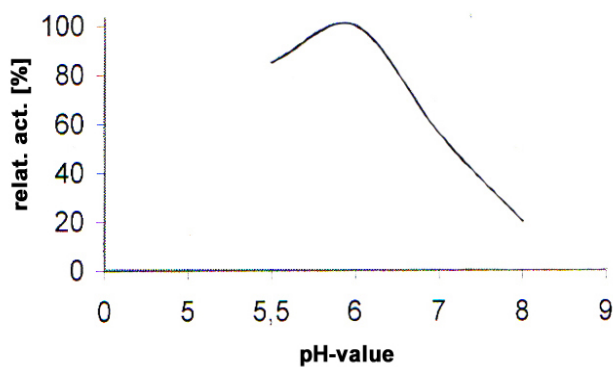


Fig.1: Lactase-activity in dependence on pH-value at 30°C

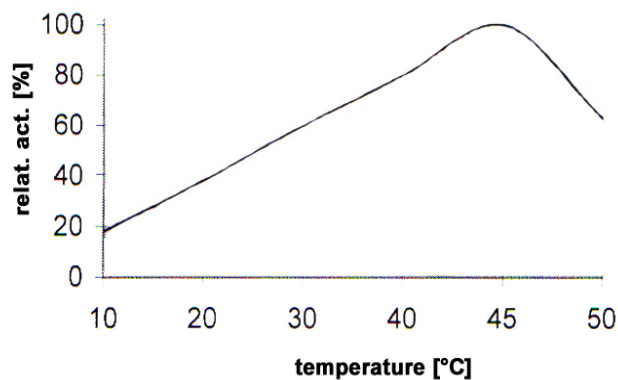


Fig.2: Lactase-activity in dependence on temperature at pH 6.5