

Enzyme Data

BCC-Nr.	003
Enzyme	Glucoamylase (γ-Amylase)
EC-No.	3.2.1.3
T_{opt}	75°C (recommended 40-90°C)
pH_{opt}	5.0 (recommended 3.5 - 7.0)
Stability	t_{1/2} (80°C) : 2 h (5 mM CaCl₂ required) no loss of activity at 60°C (>24 h)
Activity and substrate specificity	- Amylopectin, potato 4.2 U/mg (=100%) - Amylopectin, wheat 50% - Parselli starch 96% - Starch, soluble 82% - Glycogen 33% - Amylose 26% - no activity on pullulan and α-, β-, and γ-cyclodextrins
Additives	- 5 mM CaCl₂ increases stability - 1-2 mM MnCl₂ increases specific activity (~2-fold)
Assay	Bernfeld, P. (1955). Amylases, alpha and beta. Methods Enzymol. 1: 149-158.