



MALT AMYLASE STANDARD (Powder) (Lot 170810a)

E-MASTP

01/18

(EC 3.2.1.1) alpha-amylase
CAZy Family: GH13

(EC 3.2.1.2) beta-amylase
CAZy Family: GH14

E-MAST is a malt extract in which the levels of α -amylase and β -amylase have been standardised. The preparation is designed for use as a standard in the determination of α -amylase and dextrinising power using SKALAR Continuous Flow Analyser Equipment and Megazyme β -Limit Dextrin (**P-BLDX**).

PROPERTIES

1. RELATIVE RATES OF HYDROLYSIS OF SUBSTRATES:

Substrate	U/g
pNP- α -D-maltoheptaoside (Amylase HR reagent)	21,000
pNP- β -D-maltotrioside (Betamyl-3 reagent)	1,800

Action on Amylase HR reagent and Betamyl-3 reagent was determined in the presence of excess α - and β -glucosidase, respectively, as per the relevant Megazyme data booklet. α -Amylase activity was measured in sodium malate buffer (100 mM), pH 5.4 at 40°C. β -Amylase activity was measured in MES buffer (100 mM), pH 6.2 at 40°C.

2. PREPARATION FOR USE:

Accurately weigh 0.5 g of flour into a volumetric flask of 50 mL capacity. Make to volume with 0.5% NaCl and mix thoroughly. Allow the enzyme to extract over 15-20 min at room temperature with occasional mixing. Filter an aliquot of the solution through a Whatman GF/A glass fibre filter paper, or centrifuge an aliquot at 1,000 g for 10 min.

3. STORAGE CONDITIONS:

The enzyme is supplied as a lyophilised powder and should be stored dry at -20°C.