



CraftZYM® quartz

High concentrated glucoamylase for the saccharification of starch and mash-procedure improvement

Product description

Highly concentrated glucoamylase (exo-1,4- α -D-glucosidase: EC.3.2.1.3.) for the degradation of hydrolysed starch.

Aim of treatment

- Complete saccharification of liquefied starch, respectively its dextrans and oligomers
- Degradation of utilizable residual dextrans in dietetic beers and Brut-IPA
- Mash procedure improvement enzyme for single infusion mash profile, like Ale, Brut-IPA

When applying CraftZYM® quartz the food regulations of the individual countries currently in force have to be adhered to.

Dosage

CraftZYM® quartz is well effective within a pH-range of 3.4 - 6.0 (ideal between 5.2 - 5.5) and at temperatures from 58 to 65 °C. Exact dosage recommendations depend on the aim of application.

Very important:

The dosing point of the enzyme will be in the "mash-in-water" before the grist will be mashed in and as a 2nd parameter; the Calcium content in the brewwater must be higher than 35 mg/L to ensure a 100 % activity of the enzyme.

Increased Saccharification during the mashing process: 100 - 200 mL / t of grist
 Minimization of the residual extract in dietetic beers and Brut-IPA: 2 - 10 mL / 100 L wort / green beer

Enzyme characteristics: the activity range of CraftZYM® quartz is between pH 2.5 and pH 6.5, the optimum is at pH 3.8 - 4.2. The temperature range of the enzyme is between 25 °C and 80 °C, the temperature optimum is at 65 °C.

The diagrams 1 and 2 show the influence of temperature and pH-value on the enzyme activity of CraftZYM® quartz.

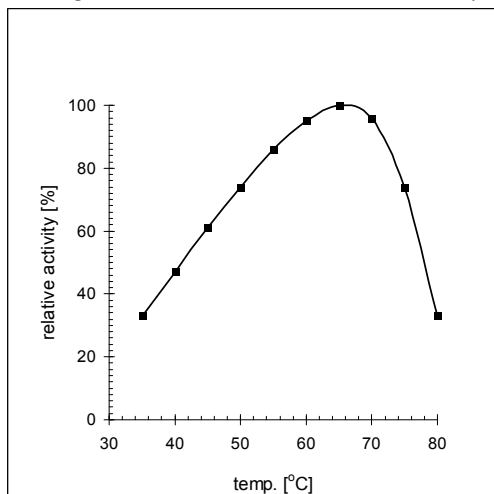


Fig 1: Influence of temperature on activity (30 % maltodextrin DE18, pH 4.0).

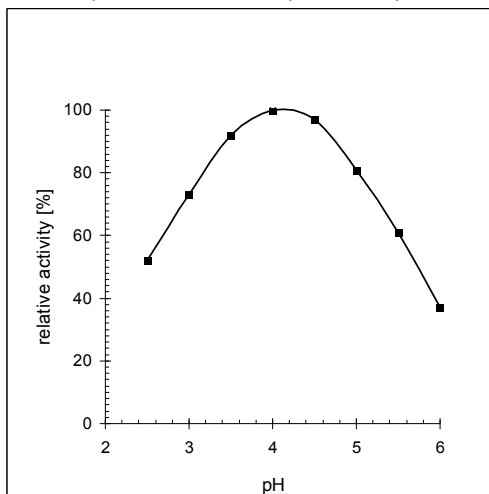


Fig 2: Influence of pH-value on activity (30 % maltodextrin DE18, 60 °C).

Storage

Store in cool conditions < 10 °C (< 50 °F). Tightly reseal package after dosing to ensure product activity remains high and to prevent cross contamination.