





# CraftZYM® quartz

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

### **Product description**

Highly concentrated glucoamylase (exo-1,4- $\alpha$ -D-glucosidase: EC.3.2.1.3.) from Aspergillus niger for the degradation of hydrolysed

CraftZYM® quartz is tested by specialized laboratories for purity and quality.

### Aim of treatment

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

#### 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 35mg/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: 2 – 5 mL/100 L green beer

## Storage

Store cool. Reseal opened packaging's tightly and use up as soon as possible.





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#### **General characteristics**

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.

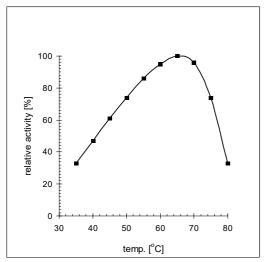


Fig. 1: Influence of temperature on activity (30% maltodextrin DE18, pH 4.0).

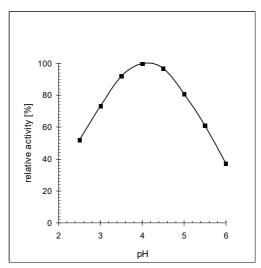


Fig. 2: Influence of pH-value on activity (30% maltodextrin DE18, 60 °C).

### Please note

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

