



# Brewline®

## THE CRAFT BREWER'S PORTFOLIO

# TECHNICAL DATA SHEET

## CraftZYM® DIAMOND

### FORMULATION

CraftZYM® DIAMOND is a concentrated specific liquid enzyme for breaking down malt glucans throughout brewing.

This enzyme is produced using a selected strain of *Talaromyces emersonii*. Its primary activity is thanks to a thermostable  $\beta$ -glucanase (endo-1,3(4)- $\beta$ -D-glucanase : EC 3.2.1.6).

### APPLICATION AREA

Breaking down of must glucans to improve clarification and filtration.

CraftZYM® DIAMOND hydrolyses the 1,4- $\beta$ -glycosidic bonds in cellulose, lichenin and glucans, especially from barley. It is active up to 90°C.

### RECOMENDED DOSAGES

CraftZYM® DIAMOND is an essential step in brewing when faced with quality problems due to seasonal variations in malt, or when malt is supplemented with raw grain (barley, wheat).

The dosage of the enzyme depends on the quality of the raw materials, the temperature and the period of action.

The dosage varies according to brewing conditions as well as the nature and the quality of the raw materials.

Average dosage : 15-25 mL/100 kg of cereals

### INSTRUCTIONS FOR USE

Dilute in cold water. Add the enzyme solution directly after malt grinding or mashing in the mash tun. Or directly in the brewing water.

The enzyme's range of activity is between pH 2.0 and pH 6.5, with an optimum pH 4.5. The enzyme's temperature range is between 15°C and 95°C, with an optimum of between 75 and 85°C.

### SPECIFICATIONS

Colour & appearance	Dark brouwn liquid
Stabilising agents	Not added
Preservatives	Not added
pH	3,2
Heavy metals	< 30 ppm
Arsenic	< 3 mg/kg
Lead	< 5 mg/kg

Density	1,005 g/mL
Total colony count	<5 x10 <sup>4</sup> /g
Coliforms	< 30 UFC/g
<i>Escherichia coli</i>	Absent in 25 g
Salmonella	Absent in 25 g
Mycotoxins	Test négative

### STORAGE

Store in its original packaging hermetically sealed, in a cool (<10°C), dry and odorless place. Storage at temperatures above 20°C could damage the enzyme. Respect the optimal use-by-date appearing on the conditioning. Use quickly after opening.

### CONDITIONING

1 kg bottle (5 kg box).

CC/22-08-2019

For use in beer brewing. For the production of products destined for direct human consumption. This document is provided for information purposes only, without commitment or guarantee, according to our current knowledge. Product in compliance with the purity specifications recommended by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and by the FCC for enzymes used in foodstuff processing. The product's conditions of use are subject to adherence to current legislation and local standards.

# Brewline®

ERBSLÖH Geisenheim GmbH - Erbslöhstraße 1 - 65366 Geisenheim - Germany - [www.brewline.eu](http://www.brewline.eu)