



Brewline

THE BREWER'S PORTFOLIO

TECHNICAL DATA SHEET

OptiFlow

FORMULATION

OptiFlow 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 β -glucanase (endo-1,3(4)- β -D-glucanase: EC 3.2.1.6).

APPLICATION AREA

Breaking down of must glucans to improve clarification and filtration. OptiFlow hydrolyses the 1,4- β -glycosidic bonds in cellulose, lichenin, and glucans, especially from barley. It is active up to 90°C.

RECOMENDED DOSAGES

OptiFlow 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: 50-100mL/T of malt

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 brown 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 ⁴ /g
Coliforms	< 30 CFU/g
<i>Escherichia coli</i>	Absent in 25 g
Salmonella	Absent in 25 g
Mycotoxins	Test négative

PACKAGING & STORAGE

- 1 kg bottles (5 kg boxes) and 20 kg jerrycans.
- Store in a cool place, ideally between 4 and 10 °C in its original unopened packaging. Storage at temperatures above 20 °C may damage the enzyme. Store in its original sealed packaging in a cool, clean, dry and odour-free place. Observe the expiry date stated on the packaging. Use promptly after opening.

PC/21-02-2024. For use in breweries. For the preparation of products for direct human consumption. Information given for information purposes only and according to the current state of our knowledge, without commitment or guarantee. Produced in accordance with the purity specifications recommended for enzymes used in food processing by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the FCC. The conditions of use of the product are subject to compliance with local legislation and standards.

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