

## BEER FERMENTATION NUTRIENT

# BrewBoost Zinc Enriched

product information

# BREWBOOST™

Zinc Enriched

## Balancing quality and efficiency to boost fermentation

Craft brewers are rigorous in ensuring their beer is of the best and most consistent quality so their customers can enjoy the taste experience that the brewer intends time after time.

Combine this with brewing process and market pressures and there is also a constant requirement to optimise efficiency and cost.

A yeast re-pitching brewing protocol can reduce yeast costs but also reduces yeast vitality and this can trigger sluggish or stuck fermentations, negative flavour impacts and the cost increases related to dealing with those issues. In addition where craft brewers are using high levels of adjuncts to reduce overall costs, fermentation nutrition and flavour/aroma can also be negatively impacted.

## Introducing BrewBoost

Specially selected from our 2000 strong yeast strain bank, BrewBoost is well suited to and capable of binding high levels of Zinc organically. Fermentation scientists have identified that supplementation of the wort with Zinc (in salt form or via a yeast carrier) can have benefits for brewers.



Specially selected inactive yeast-based fermentation nutrient containing a **high level of organically bound Zinc.**



'Organically bound' Zinc can have a **higher level of bio-availability** to the environment it is placed in than Zinc salts.

### Type:

BrewBoost is a specially selected inactive yeast based fermentation nutrient which contains a high level of organically bound Zinc, a mineral which has been proven to positively impact brewing fermentation.

This nutritional yeast supplement provides readily available sources of nitrogen and zinc to **secure fermentation of beer wort.**

### Characteristics:

- BrewBoost presents high bio-availability of zinc, which is a key factor in yeast nutrition.
- A safe and complete fermentation can only be obtained with a healthy yeast biomass fermenting a nutrient balanced wort. Even an all malt grist-based wort requires supplementation with zinc.

### Application:

BrewBoost can be used to secure fermentation of all your beers. By using BrewBoost you get a greater consistency in flavour, and produce cleaner and more balanced beers.



**Better flocculation**



**No sulphur notes**



**Better attenuation**



**Lower diacetyl**

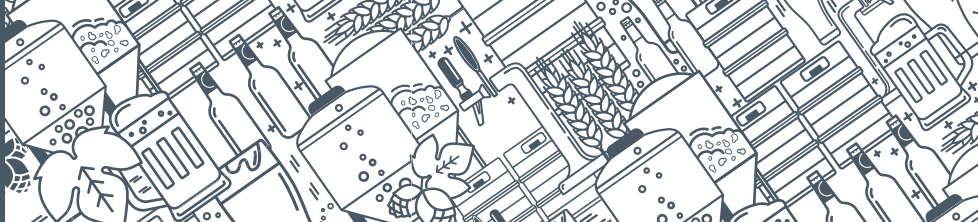


**Improved yeast viability**



**Fast and consistent fermentation**





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## Scientific background

Zinc is a cofactor for the enzyme alcohol dehydrogenase, it governs protein synthesis and phospholipid composition of membranes in yeasts. Zinc is required for yeast growth and metabolism as it stimulates uptake of maltose and maltotriose, increases fermentation rate and plays a key role in yeast flocculation. Wort alone does not provide enough zinc for consistent fermentations. Yeast requires between 0.050 and 0.300 ppm available zinc: lager needs less (0.050 - 0.150 ppm) and ale needs more (0.150 – 0.300 ppm).

**Formulation:** BrewBoost is a natural zinc enriched inactivated yeast (*Saccharomyces cerevisiae*).

### Typical Analysis at packaging:

% Solids	94 - 97%
Zinc Content	> 50,000 ppm
Total Bacteria (cfu/g)	< 1.0E+03
Wild Yeast (cfu/g)	< 1.0E+03

### Instructions for use:

- 1 BrewBoost is readily dissolved in water.
- 2 Add BrewBoost in the kettle 10 mins before the end of boil, or in the whirlpool.

**Pitching rate:** 1-2 g / hL of wort ; the pitching rate varies with original gravity of the wort as well as brewing conditions.

**Storage conditions:** Product should be stored under **dry conditions at room temperature.**

**Shelf life:** Four years from production date.

**Packaging:** 500g re-sealable packs and sachets.

for **Craft Brewers** from craft beer lovers

## Features and Benefits

Brewers, using BrewBoost as an addition to their process when re-pitching yeast or using high levels of adjuncts, can benefit from a product which provides a **positive fermentation nutrition impact** from both the inactivated yeast and the problem-solving benefit of the Zinc naturally bound to it .

**Our brewers and yeast technologists have worked with external fermentation specialists to assess the potential benefits and studies have shown that the use of BrewBoost:**

- ✓ Features naturally zinc enriched *Saccharomyces cerevisiae*
- ✓ Ensures sufficient zinc is available in the wort
- ✓ Promotes the accumulation of zinc inside yeast cells in the wort
- ✓ Produces consistent fermentation and beer quality over generations of re-pitching
- ✓ Reduces fermentation time
- ✓ Promotes optimal uptake of maltose and maltotriose to maximise alcohol yield
- ✓ Reduces the risk of sluggish fermentation due to poor yeast health which could lead to the production of off-flavours
- ✓ Beneficial in high gravity fermentations
- ✓ Beneficial when high levels of adjuncts are used to optimise fermentation process and efficiency
- ✓ Promotes better flocculation and reduces beer losses

