

ENZYMES

# IMOBLOOM

REDUCED FERMENTABILITY. IMPROVED FLAVOUR.

The shift towards moderate alcohol consumption reflects a broader trend of health-conscious consumers reassessing their habits to align with healthier lifestyles. Booming sales and an expanding range of options make pubs more inclusive than ever.

## What is IMOBloom?

IMOBloom is a new enzyme technology based on transglucosidase activity that offers an innovative approach for achieving reduced fermentability. When added during mashing, it will create unfermentable isomaltoligosaccharides (IMO) and reduce the fermentability of the wort.

## Improved Mouthfeel, Authentic Flavour & Aroma

When combined with optimised raw material selection and mash regimes, brewers can achieve a real degree of fermentation (RDF) below 40%. Furthermore, the unfermentable IMOs created will remain in beer and provide more mouthfeel. This innovation enables breweries to produce beers with conventional flavours and aromas, without change to maltose negative yeasts or increased mashing temperatures.

## Maximise Your Benefit – Enzyme Technology PLUS Dealcoholisation

The lower alcohol content in beers made with IMOBloom allows for better aroma retention and recovery in dealcoholisation processes. Additionally, less energy is required to remove the residual alcohol. Research has also demonstrated that throughput can be significantly increased, leading to up to 60% higher beer production efficiency.

## DID YOU KNOW? ?

IMOs exhibit **low glycemic index** and are often discussed as being prebiotics.



## BENEFITS



- Ideal for Low ABV beers and sessions
- Up to 40% less ABV
- Better mouthfeel, less warty off-flavours
- No speciality yeasts needed

## In combination with dealcoholisation

- Increases Non-alcoholic beer production volume by 60%
- High aroma recovery

## APPLICATION



### How Much To Add

1 - 5 kg/MT of grist

### When To Use

To the mash vessel during or immediately after mashing in.

### Activity Range

pH: <5.5

Temperature optimum: 68°C

## STORAGE



### Temperature

Recommended storage temperature: <10°C | <50°F  
Do not freeze.

### Location

Cool, sealed, and away from direct sunlight.

### Shelf Life

At the recommended storage conditions, two years from date of manufacture.

## How Does It Work?

This transglucosidase enzyme converts fermentable sugars into non-fermentable isomaltoligosaccharides (IMOs) with highly resistant  $\alpha$ -1,6-linkages.

IMOBloom first binds to one glucose unit within a maltose molecule, releasing the other glucose. The enzyme-glucose complex then reacts with another maltose molecule, transferring the glucose to form panose, while liberating additional glucose (Figure 1). The free glucose from maltose, along with other glucose generated during mashing, undergoes further secondary reactions (Figure 2), influencing the overall carbohydrate profile of the wort.

Fig.1:  
Primary  
reaction in  
mash

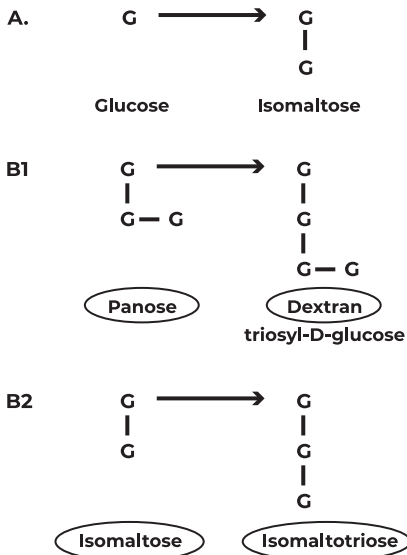
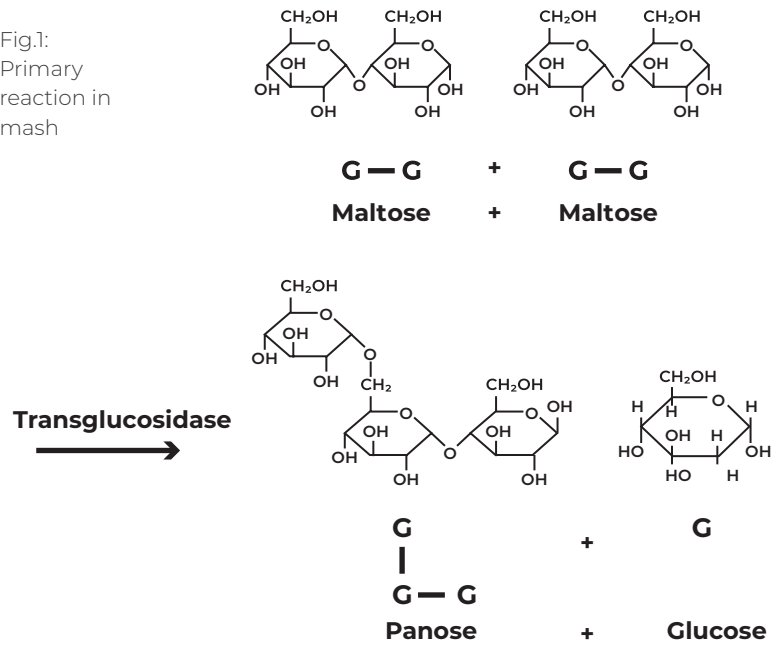


Fig.2: Secondary enzymatic reactions catalysed by transglucosidase

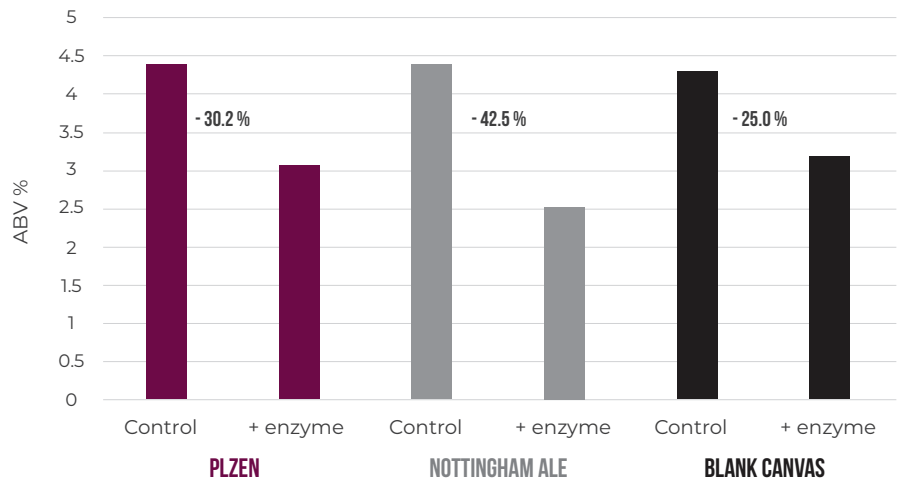


Fig.3: Wort was made using a 65°C isothermal mash for one hour. The resulting wort was fermented using three different yeast strains.



## WANT TO KNOW MORE? GET IN TOUCH

Head to our website: [www.gladfieldmalt.co.nz](http://www.gladfieldmalt.co.nz)

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