

Dairy, Baking & Beverages

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Application Data Sheet

Brewers TasteZyme™ G

Effective solution to balance the sweet and sourness of non-alcoholic beers

PRODUCT DESCRIPTION

Brewers TasteZyme™ G is a micro-granulated form of the glucose oxidase enzyme produced by classical *Aspergillus niger*, available in 20 kg pack size.

BENEFITS

Alcohol free beers can be produced using different methods. During the biological production of non-alcoholic beer, the activity of the yeast is suppressed to prevent the formation of alcohol. Therefore, aldehydes are no longer converted into neutral or characteristic beer flavors, leading to the sweet aftertaste of non-alcoholic beer, contrary to non-alcoholic beers of which the alcohol is being removed in a later stage using vacuum distillation techniques. With **Brewers TasteZyme™ G** the breweries are now offered a simple and effective solution to improve the sweet and sour balance of non-alcoholic beers produced via these so called "cold contact or limited/arrested fermentation" methods. As this enzyme is considered a processing aid, no labeling is required.

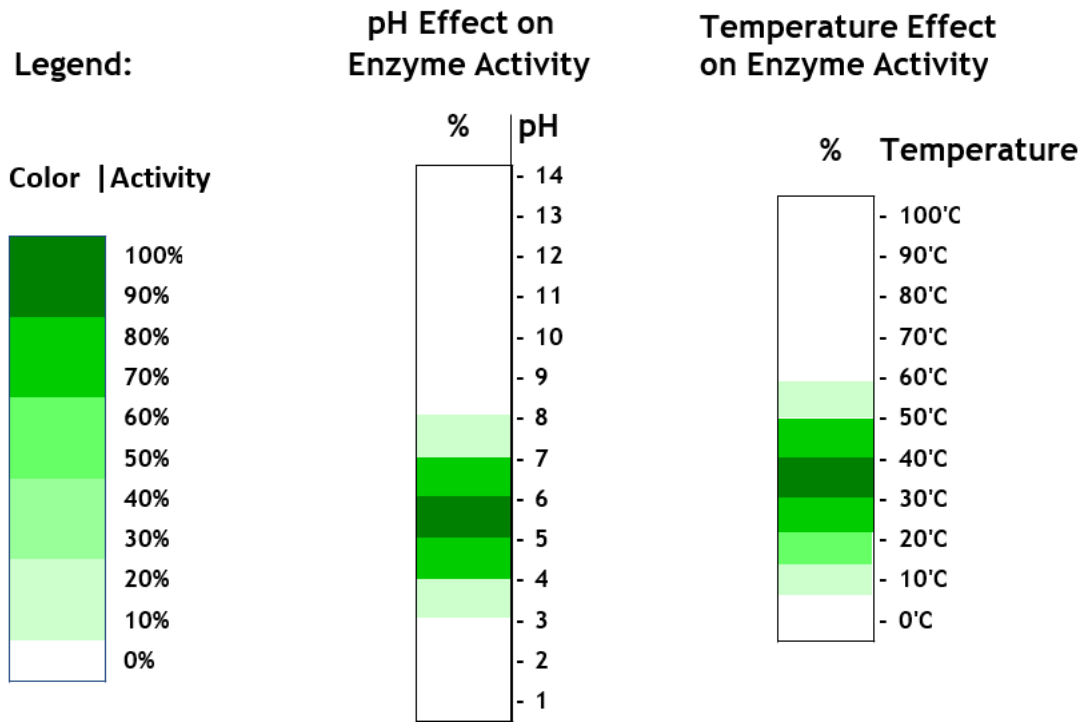
Brewers TasteZyme™ G is a glucose oxidase enzyme that converts glucose, which is present in most of the non-alcoholic beers produced via cold contact or limited fermentation, into gluconic acid that will give a more sour taste to these alcohol-free beers. As a result, these beers will have an improved sweet and sour balance, which is appreciated by consumers of alcohol-free beers. Apart from the direct souring effect, this solution will also contribute positively to the freshness of beers over time, as this glucose oxidase enzyme also acts as an oxygen scavenger, as any oxygen is immediately consumed because of the dynamics of the enzymatic conversion.

APPLICATION

For an optimal functioning of the enzyme, it is recommended to dose approximately 1.0 – 2.0 kg enzyme/ton of raw materials during the mashing in process. If it is desired to dose a liquid, **Brewers TasteZyme™ G** should be mixed and diluted at a dosage of 1 kg in 4 liters of ambient brewing/product water, just before dosing to the mash tun. The optimal pH for highest activity is in the range of 4.5 – 6.5 and the optimal temperature is in the range of 20°C – 60°C.



Brewers TasteZyme™ G will be completely inactivated during the subsequent wort boiling process. See also optimal enzyme conditions in the tables on the next page.



TECHNICAL SERVICE

This product was developed by our dedicated team of experts. They can help you to maximize the yield and efficiency of your brewing processes, building on extensive biochemical knowledge and many years of brewing experience.

Please contact your local DSM Food Specialties technical sales representative to receive additional information on meeting your needs.

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For further information, additional addresses and our webshop visit www.dsm.com/foodandbeverages

Date of issue: March 11, 2024

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