

BakeZyme[®] Hemicellulases

A range of efficient and easy to use processing aids for quality bread making

a **DSM**Product



An exciting product range full of functionality

Recent years have seen the emergence of new global food trends, such as health, convenience and indulgence. Consumers are becoming increasingly aware of what high quality bread should look and taste like, thereby putting enormous pressure on the bakery industry to create the perfect loaf. The baking industry strives to meet these demands and is continuously looking for ways to produce better bread and keep consumers happy.

In order to help manufacturers offer improved service to the baking industry, DSM has developed a full range of hemicellulases offering a comprehensive range of functional benefits.

The facts

Hemicellulose is composed of various non-starch polysaccharides, which are present in the cell wall of plant tissues. The arabinoxylans are the most important component in flour, followed by the cellulose fibrils. These cellulose fibrils are often intertwined with the hemicellulose. Their degradation is achieved by several specific enzymes – the hemicellulases. Each performs a different degradation reaction, often working in synergy with each other.

Specific hemicellulases will be needed depending on the variety of flour used, the extraction rate of the milling process, as well as environmental and climatic conditions. The type of process and bread formulation will also require different solutions.

The solutions

Hemicellulases can be used for all types of bread and baked products. They can improve dough machineability, dough handling properties, crumb softness, bread volume and final product appearance, such as crumb structure and oven spring. Whether you are in need of a single hemicellulase, a single cellulase or a synergistic blend of enzymes, DSM has the solution.

let's **BakeZyme**

Unlimited. **DSM**

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New opportunities

DSM provides new opportunities, tailored to consumer demand, to develop and extend product choice. Bakezyme[®] Hemicellulases cater to the individual needs of the whole baking industry, creating unlimited possibilities for efficient production of high quality bread.

Key benefits of BakeZyme[®] Hemicellulases

- Improved dough development
- Dry dough
- Optimised gluten extensibility and gas retention
- Improved dough tolerance and proofing stability
- Improved oven spring
- High loaf volumes
- Regular and fine crumb structure
- Soft and elastic crumb structure

Product	Application benefit	Application area	Origin
Fungal hemicellulase			
BakeZyme[®] HS 2000 BG	Non-GMO preparation for universal use, creating improved dough development and increased loaf volume	All types of bread	Aspergillus sp.
BakeZyme[®] HS 10.000 BG	Non-GMO preparation for universal use, creating improved dough development and increased loaf volume	All types of bread	Aspergillus sp.
BakeZyme[®] HSP 6000 BG	Preparation for universal use, creating improved dough development and increased loaf volume	All types of bread	Aspergillus sp.
Bacterial hemicellulase			
BakeZyme[®] BXP 5000 BG	Overall improved dough and bread quality, improved loaf volume in particular, creating additional crumb softness	All types of bread	Bacillus sp.
BakeZyme[®] BXP 5001 BG	Overall improved dough and bread quality, improved loaf volume in particular	All types of bread	Bacillus sp.
Functional hemicellulases			
BakeZyme[®] Real-X	Improved dough development to create additional volume	French types of bread and bread requiring high volume	Trichoderma sp.
BakeZyme[®] Concreate	Improved dough development to obtain dry and elastic dough	German bread rolls	Trichoderma sp.
BakeZyme[®] X-cell	Improved dough development and elasticity of the dough to create fine and regular crumb structure	Tinned bread and bread requiring additional oven spring	Trichoderma sp.
BakeZyme[®] WholeGain	Improved dough development and fermentation stability of the dough	High fibre bread types and long fermentation bread processes	Trichoderma sp.
BakeZyme[®] X-pan	Improved dough development and extensibility	Tinned bread and high volume bread types	Aspergillus sp.

For more information on DSM's range of enzymes, please contact info.bakingenzymes@dsm.com or visit www.dsm-foodspecialties.com

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