

SHELFEX® BK

IN GLUTEN FREE BRIOCHE

Handary
SHELF LIFE



KEY BENEFITS

- Growth inhibition of yeasts & molds;
- Maintains moisture, texture and softness;
- Enhances volume & shape;
- Prolongs freshness;
- Natural, Customer-friendly label;

	Shelfex® BK
Code	4101
Registration Number	Clean Label
Organoleptic impact	No Impact
Source	Non-GMO, renewable
Thermal Stability	Up to 150°C
Applicable pH	5.5 - 8
Recommended dosage	2-5g/Kg
Packing Size	0.5KG, 10KG, 20KG
Appearance	Light Yellow Powder
Labelling	Berry Extracts

NATURAL MOLD AND YEASTS INHIBITOR IN BAKERY

Brioche bread has its origins traced back to France, renowned for its rich and tender crumbliness, thanks to its high content of eggs and butter. These ingredients are responsible for the brioche's delightful texture and flavor. Brioche is known for its light and puffy nature, adorned with a beautiful dark golden color achieved through the application of an egg wash after proofing.

Gluten-free brioche encounters similar spoilage challenges as regular brioche, but there are specific issues associated with gluten-free products. Mold growth poses a common problem, as mold spores settle on the brioche's surface and thrive under conditions of inadequate packaging, improper storage, or high humidity.

Additionally, gluten-free brioche tends to stale faster due to the absence of gluten, leading to a quicker loss of freshness and moisture. Rancidity becomes a concern, especially if the brioche contains nut flours or oils, as fats can oxidize and develop off-flavors. Furthermore, the altered structure and moisture content of gluten-free brioche make it more susceptible to microbial spoilage, highlighting the crucial role of proper food safety practices.

Handary's Shelfex® BK is an all-natural botanical extract composed of maltogenic amylase derived from berries. This solution is utilized to extend the shelf life of gluten-free brioche and other bakery products by inhibiting yeasts and molds, while also enhancing volume and shape, and ultimately prolonging the freshness of the baked goods. Shelfex® BK is a clean label solution developed in response to consumer demands for natural preservation methods.

OUR BRANDS

SHELFEX® BK
Shelf-Life Extender



CASE STUDIES

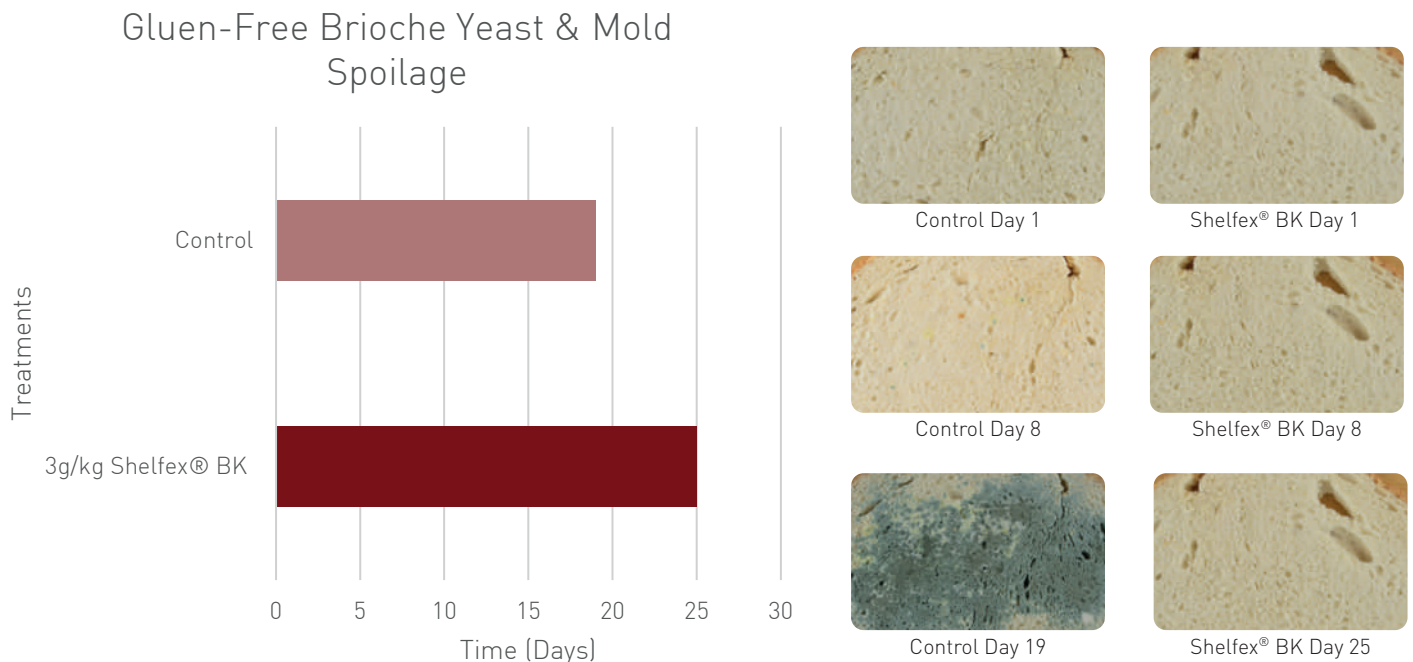
Brioche is a bakery product that is susceptible to fungal spoilage due to its pH range of 5.8-6.2 and water activity of 0.82-0.84. Additionally, gluten-free products are particularly prone to moisture-related spoilage issues. In light of these challenges, we have conducted a case study using the Shelfex® BK product to address these concerns and enhance the shelf life of gluten-free brioche.

SHELFEX® BK: GLUTEN-FREE BRIOCHE SHELF-LIFE EXTENSION

Shelfex® BK was added to the dry ingredients of the gluten-free brioche at a dosage of 3 g/Kg of flour. The objective of the study was to investigate the impact of Shelfex® BK on the extension of shelf life and freshness compared to control samples without any product.

The graph presents the significant results obtained with Shelfex® BK, demonstrating its ability to significantly prolong the shelf life of the brioche for over 25 days when stored at room temperature. In contrast, the control brioche exhibited visible mold growth after 19 days of storage.

Remarkably, the samples treated with 3g/Kg of Shelfex® BK remained free of mold even after 25 days of storage. These findings highlight the effectiveness of Handary's Shelfex® BK as a natural solution in enhancing microbial stability and extending the shelf life of gluten-free brioche, while successfully inhibiting mold growth and preserving its freshness and texture.



CONCLUSION

Overall, these findings suggest that Shelfex® BK can be a highly effective solution for preventing microbial spoilage in brioche products more specifically gluten free, and further research can be conducted to explore its potential for use in other types of gluten free bakery products.

Handary's natural preservatives can help maintain the quality and safety of the product, reducing the risk of spoilage, improving texture and ensuring customer satisfaction.



APPLICATION GUIDELINE

The following guideline will assist you to get the optimum solution by using Handary 's Shelfex® BK to effectively and naturally extend the microbial stability and the shelf-life of gluten free brioche.

DIRECT ADDITION INTO FORMULATION

Follow the suggested dosages to apply directly Shelfex® BK into brioche formulation.

Ingredients	Application		Benefits	Dosage
Shelfex® BK	Bakery	Gluten-Free Products	Growth Control of Yeast & Molds; Texture & Volume Enhancer	2.5-5.0 g/kg

Shelfex® BK recommended dosages, based on the flour weight, are added along with the other dry ingredients at the beginning of dough preparation during the making of the brioche. Dosages ranging from 2.5-5 g of Shelfex® BK are then added per 1 kg of flour.

BREAD MANUFACTURING PROCESS

Follow the representative production process flow chart of gluten-free brioche and the recommended stages of product incorporation to get the best efficiency of Shelfex® BK in gluten-free brioche application.

