

PLANTERIA® BF

IN BREAD

Handary
SHELF LIFE



KEY BENEFITS

- Inhibits Total Plate Count (TPC);
- Inhibits Yeast & Mold;
- Improves microbial & oxidative stability;
- Cost-effective;
- Shelf-life extension;
- Clean Label;

	Plantéria® BF
Code	0702
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	2.5-5 g/kg
Packing Size	0.5KG, 10KG
Appearance	Off-White Powder
Labelling	Berry Fruit Extract
Solubility	Water Soluble

NATURAL MOLD AND YEASTS INHIBITOR IN BREAD

Although bread is considered one of the most widely consumed products in the world, it is also one of the most perishable. Bread's intrinsic factors, such as high water activity and slightly acidic pH, favour the growth of moulds. Although bread is baked at high temperatures, contamination can occur after processing, through the deposition of mould spores from the air, cutting, cooling and packaging on the surface of the bread. Typically, the shelf life of bread is about 3 to 6 days, after which defects such as off-flavour, mould and discolouration usually occur.

Traditionally, calcium propionate and sorbic acid are used in the bakery to prevent mould and extend the shelf life of bread. Lately, the demand for natural ingredients is steadily increasing, and labelling is becoming crucial to meet this consumer demand for clean-label products.

Handary's Planteria® BF is a botanical extract composed from different berry extracts to achieve naturally occurring sorbic acid. It is an all-natural solution to extend the shelf life of bread and other bakery products. In addition, Planteria® BF has been shown to effectively inhibit the growth of spoilage moulds during the shelf life of bread, without compromising its quality, freshness and sensory characteristics.

OUR BRANDS

PLANTERIA® BF
Citrus Fruit Extract



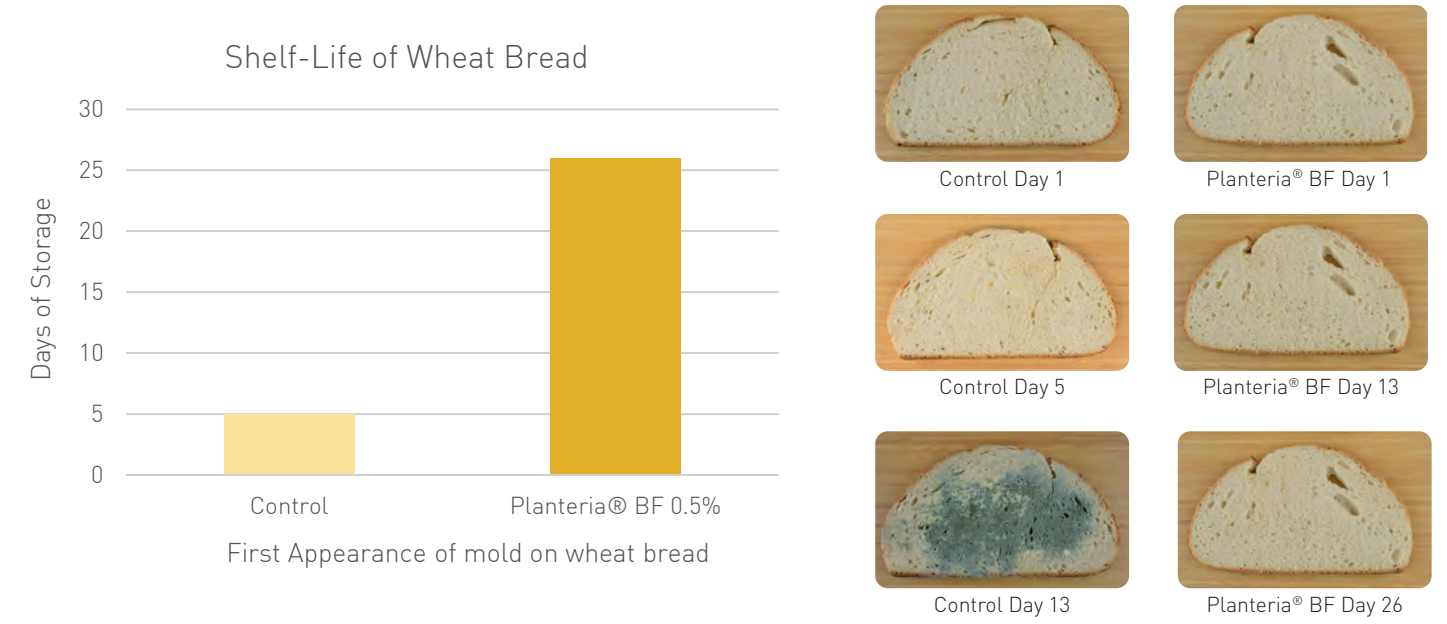
CASE STUDIES

Many problems can affect bread and bakery products, one of them being moulds. They can appear on the surface of bread and start to grow even before the end of its shelf life. One of the factors to take into account is that moisture trapped in bags, for example, can be absorbed by the fungus and grow at a faster rate.

PLANTERIA® BF: SLICED WHEAT BREAD SHELF-LIFE EXTENSION

The images and graph show the unique results of Planteria® BF, which was able to extend the shelf life of bread up to 26 days when stored at room temperature. The control bread (with no added natural or chemical preservatives) showed the first visible mould after 5 days of storage and was completely mouldy after 13 days of storage.

On the other hand, moulds never appeared on samples treated with 0.5% of Planteria® BF after 26 days of storage. The study demonstrates that Handary's Planteria® BF is an effective natural solution capable of increasing the microbial stability and shelf life of sliced bread and completely inhibiting mould growth.



COST IN USE OF PLANTERIA® BF IN WHEAT BREAD

In order to adapt to our customers, Handary contemplates the cost in use of our products. Our recently launched Planteria BF is used to preserve the shelf-life of bread. Thus, we have tried to compare the prices of all the ingredients used in a bread baking process line in addition with natural preservatives from Handary.

Planteria® BF is a completely natural solution that gives excellent results against yeasts and molds, helps improve visibility of your final product in market, saves the producer from economic losses, all with an extra advantage of clean labeled products on market.

Ingredients	Cost per Bread	Total cost
Flour	0.31€	0.39€
Water	0 €	
Salt	0.002€	
Yeast	0.008€	
Planteria® BF	0.07€	



APPLICATION GUIDELINE

The following guideline will assist you to get the optimum solution by using Handary Planteria® BF to effectively and naturally extend the microbial stability and the shelf-life of bread.

DIRECT ADDITION INTO FORMULATION

Follow the suggested dosages to apply directly Planteria® BF into bread formulation.

Ingredients	Application		Benefits	Dosage
Plantéria® BF	Bakery	All Types of Bread	Prevent Yeasts & Moulds Growth	2.5-5.0 g/kg

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

BREAD MANUFACTURING PROCESS

Follow the representative production process flow chart of bread and the recommended stage of product incorporation to get the best efficiency of Planteria® BF in bread application.

