



PRODUCT DESCRIPTION AND SPECIFICATION

BISCUIT PROTEASE 0.8

Introduction

In the production of biscuits it is necessary to reduce gluten strength in the dough. Traditionally this has been done by incorporating sodium metabisulphite into the dough recipe.

Sodium metabisulphite acts by breaking down the sulphide cross links in the gluten structure. As such there are limits to the efficacy of sodium metabisulphite.

Additionally, sodium metabisulphite is not permitted as a food ingredient in a growing number of countries.

Thus the use of protease enzymes offers an alternative way of reducing gluten strength.

Benefits

Protease enzymes used in the production of biscuits give the following benefits

- Reduced mixing time – typically by 25%
- Reduced fermentation time – typically below 4 hours
- Better crispiness, texture, shape and imprint of biscuits
- Less rejects and wastage

Activity

Biscuits Protease 0.8 is a blend of two protease enzymes.

- (i) A microbial neutral protease produced by fermentation of *Bacillus subtilis*.
- and (ii) A papain component prepared by extraction from papaya latex.

Microbial neutral protease is present at a dosage of 0.4 Anson Units/g.
Papain is present at a dosage of 20 TU/mg.

Due to the synergistic effect of these enzymes the protease activity of Biscuit Protease 0.8 exceeds the equivalent of 0.8 Anson Units/g.

Food Grade Status	Biscuit Protease 0.8 is produced by blending approved food grade ingredients in a HACCP/GMP certified facility. The product meets JECFA/FAO specifications for food grade enzymes.
Halal Status	Biscuit Protease 0.8 is a Halal Certified product certified by JAKIM
Storage	<p>Biscuit Protease 0.8 should be stored in a dry place and cool.</p> <p>Storage in an air-conditioned room is recommended.</p> <p>The product has an overfill and when stored in an air-conditioned room it has a shelf life of 12 months from production date.</p> <p>Storage under direct sunlight or in hot rooms or warehouses may result in shorter shelf life.</p>
Packing	Biscuit Protease 0.8 is available in 10kg plastic lined carton boxes.
Dosage	<p>Biscuit Protease 0.8 is recommended to be used at a dosage of 200 – 300 ppm based on flour weight. Higher dosages are recommended for stronger wheat with higher protein content.</p> <p>Overdosage is indicated by a soft dough.</p>