



## Product Description and Specification

### GEN 911

#### Description

GEN 911 is a maltogenic amylase which acts as a shelf life extender for baked goods.

The maltogenic amylase (EC number 3.2.1.133) is produced using submerged fermentation of *Bacillus subtilis*.

The enzyme concentrate used to formulate GEN 911 is from a generic source.

#### Specification

Appearance : The product consists of light brown non-dusting enzyme microgranulates dispersed in a carrier of tapioca starch.

Solubility : The active ingredient of GEN 911 is readily soluble in water. The carrier is insoluble.

Moisture : GEN 911 has a maximum of 13% moisture.

#### Activity

GEN 911 has a declared activity of 100 MAU/g. There is typically an overfill of 5 – 10% during production.

#### Food Grade Status

GEN 911 complies with WHO/JECFA and FCC recommendations for food grade enzymes.

#### Storage

GEN 911 should be stored in a dry place and cool.

Storage in an air-conditioned room is recommended.

The product has an overfill and when stored in an air-conditioned room it has a shelf life of 12 months from production date.

Storage under direct sunlight or in hot rooms or warehouses may result in a shorter shelf life.

**Packaging**

GEN 911 is available in 10kg plastic-lined carton boxes.

**Application**

GEN 911 is used to extend the shelf life of baked goods without gumminess or affecting dough handling properties. It works on the starch fraction during the gelatinisation temperature. It has no effect on dough consistency or loaf volume.

The antistaling effect of GEN 911 is most noticeable from Day 3 onwards.

**Dosage**

The recommended dosage of GEN 911 is 100 – 120 ppm. The optimum dosage can vary depending on the flour quality, formulation and process. Therefore it should be determined through baking trials.

In sponge and dough bread production GEN 911 is to be added into the dough state.

GEN 911 is inactivated during baking.