


Product sheet	Characteristics of NATURAL AMYLASES attached to the flour bags	
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Mai 4th 2023

**They are natural amylases of malt and of Sweet Potatoes
These amylases enable preparation of
Concentrated Liquefied Porridge (CLP).**

MALT

"Malt for porridge" comes from a grain that has been germinated and then dried, ground and sifted.

It comes in the form of flour.

The cereals used to prepare malt for porridge can be red or white sorghum, maize, small millet or paddy rice or any other cereal grains.

SWEET POTATO

Natural sweet potato amylase comes from grated, dried, ground and sifted sweet potato.

It comes in the form of flour.

COMPOSITION

- Short-chain carbohydrates: maltose, iso-maltose, sucrose, glucose, fructose, and dextrins.
- Proteins
- Enzymes : amylases β and α , phytases
- Vitamins (B1- B2- PP)
- Minerals (Potassium, phosphorus, magnesium...).

The one of the crude sweet potato

- Carbohydrates (Starch)
- Enzymes : Amylases β , the quality and quantity of which vary depending on the sweet potato,
- Vitamin A
- Minerals

EFFICIENCY OF NATURAL AMYLASES

High amylase content of malt or in sweet potato determines their liquefying power on thick porridge.

The degree of liquefaction also depends on the nature of the starches in the flour used to make the porridge (in particular the amylose/amylopectin ratio, which varies according to the species, variety and maturity of the grains) and the fineness of the milling.

The quality of natural amylase is more important than its quantity.

BACTERIOLOGY

Malt and sweet potato cannot be "sterilized" by heating because this would destroy the amylases. A maximum of hygienic precautions is therefore necessary during their preparation.

As the amount of natural amylase to be added to the thick porridge is very small, three pinches, i.e. less than 1g / 200 ml of porridge, a possible bacterial contamination would merge with those of the environment (bowl and spoon used to consume the porridge).

PACKAGING

A small bag of 8 to 10 g of "natural amylase" is placed on top of each 500 g bag of BAMiSA flour. .

**Natural amylases can be used to liquefy
any cereal porridge or tuber mash.**

**Natural amylase from malt or sweet potato can be considered as a "product" that can
be distributed or sold separately for the preparation of BCL.**