

# VERON<sup>®</sup> HF

## Description and Specification

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### Description

VERON<sup>®</sup> HF is a xylanase preparation, without fungal  $\alpha$ -amylases activity, for the treatment of flours with additional Transglutaminase activity. The enzyme is obtained from specific cultures of *Aspergillus niger*.

- IUB-No.: 3.2.1.8
- CAS-No.: 9025-57-4

### Properties

The product has the following characteristics

- a) solid product
- b) light beige coloured with aromatic smell

### Activity

VERON<sup>®</sup> HF contains a declared minimum activity of 660 XylH g<sup>-1</sup>.

1 XylH corresponds to that enzyme activity which releases from xylan a quantity of reducing groups equivalent to 1  $\mu$ Mol xylose / min. at 30 °C under standard conditions using the hydrazid method.

### Application

VERON<sup>®</sup> HF is used for the treatment of flours for the manufacture of bread and rolls. Especially due to the Transglutaminase activity it has a distinct stabilizing effect on rye, rye mixed and whole meal flour systems. Thereby also shows extraordinary good performance in mixed flour systems between wheat- and/or rye flour and e.g. dietary fibres (for the most part soluble), oatmeal, cornmeal, soya flour... VERON<sup>®</sup> HF is an enzyme preparation with excellent properties to improve dough and fermentation stability, baking volume and break and shred. Flour treatment with VERON<sup>®</sup> HF ensures extraordinary stable and dry doughs, better bread shape.

**The product is also used to replace wheat gluten. 1kg of wheat gluten can be replaced with 4-5g of VERON<sup>®</sup> HF.**

### Dosage

The optimum dosage of VERON<sup>®</sup> HF should be determined for each flour quality by baking tests, e.g. 5 - 15 g / 100 kg flour for rye mixed bread (70% rye and 30% wheat flour) with

direct acidification. If flour with high Amylogram and Falling number figures is used the addition of  $\alpha$ -Amylase (VERON<sup>®</sup> M4 or VERON<sup>®</sup> AC) is recommended.

### **Specification**

The product fulfils the requirements of the FAO/WHO's Joint Expert Committee for Food Additives (JECFA) and Food Chemicals Codex (FCC).

The total viable counts are within the upper limit of  $5 \times 10^4 \text{ g}^{-1}$

E.coli:  $<10 \text{ g}^{-1}$  (according to method ISO 7251:1993)

### **Storage**

Stored in a dry place at room temperature the activity loss will be less than 10 % within one year.

### **Handling**

When handling enzyme products in powder form, direct skin contact and dust formation should be avoided. Enzymes may irritate the skin and eyes; the inhalation of enzyme dust may provoke sensitisation of the respiratory organs.

For further details on the safe handling of our products, please consult our safety data sheet and the technical information sheet "Precautionary measures when handling enzyme products in powder form."