



Product Information Sheet

Baketec-G 10,000

An *Enzyme Supplies* glucose oxidase enzyme preparation for increasing dough strength and conditioning in the baking industry

INTRODUCTION

Baketec-G 10,000, is a glucose oxidase enzyme preparation derived from a selected strain of *Aspergillus niger* which catalyses the oxidation of glucose to gluconic acid with the concomitant production of hydrogen peroxide.

TYPICAL CHARACTERISTICS

Appearance – beige powder

APPLICATION SCOPE

Baketec-G 10,000 acts quickly at the mixing stage where abundant oxygen is present. Glucose present in the flour is transformed into gluconic acid and hydrogen peroxide which oxidises SH-groups to form S-S bridges which reinforce the gluten framework. The result is a stronger and more elastic dough with good resistance to mechanical shock, better oven spring and resultant larger bread volume.

The production of hydrogen peroxide can also affect the coupling between pentosanes and the pentosan-gluten matrix through linkages of ferulic acid radicals which increase the water binding capacity of the dough. As a result a dryer dough is obtained. Ascorbic acid does not affect the action of *Baketec-G 10,000*.

The advantages of *Baketec-G 10,000* are:

- Ascorbic acid or chemical oxidants can be reduced or replaced
- Improved machinability due to dryer dough characteristics
- Improved dough strength
- Improved crust and bread shape

Baketec-G 10,000 can be combined with other enzymes such as *Baketec –AX* to benefit from a synergistic effect.

CAUTION: *Baketec-G 10,000* produces hydrogen peroxide which can produce off-flavours when recipes contain high amounts of fats. Laboratory trials are recommended before scale-up.

DOSE RECOMMENDATION

The dosage of *Baketec-G 10,000* is between 1g and 2g per 100Kg of flour.

PACKAGING

Baketec-G 10,000 is supplied in poly-lined 25Kg cardboard boxes

STORAGE STABILITY

When stored at temperature below 20 °C and in a dry place, *Baketec-G 10,000* shows no significant loss in activity over a period of one year.

CONFORMITY:

Baketec-G 10,000 conforms to all relevant International standards including FAO, WHO, JECFA and FCC specifications

SAFETY AND ENZYME HANDLING

Inhalation of dust from powder enzymes should be avoided. Open in a well-ventilated environment. In case of contact with skin/eyes, promptly rinse with water for at least 15 minutes. Clean any spillages with low-pressure water hoses, avoiding the formation of aerosols. For more detailed information please refer to the Material Safety Data Sheet for this product.

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