XYLANASE AN®

DESCRIPTION
Xylanase AN is complex hydrolytic enzyme preparation which has pronounced effect on complicated hemicellulose substrates containing xylan, manan, glucan etc. The effective action of the enzyme complex is enhanced by other important hydrolytic enzymes, present in the preparation which decompose cellulose, lichenin, araban, pectin, etc. It is produced by submerged fermentation of specially selected producer strain of Asp. niger.

UNITs OF ACTIVITY
Enzyme activity is expressed in xylanase units, representing the amount of enzyme which liberates 1 µmol of xylose in a reaction at T - 40°C, pH - 4.0, during -1 min.

STANDARDS
1 000 - 3 000 U/g exo-xylanase activity
3 000 - 9 000 U/g endo-xylanase activity

PHYSICAL PROPERTIES
Form - powder or liquid
Colour - dark beige, brown
Dry substance - over 90% for the powder; 25% - 35% for the liquid preparation
Solubility - water-soluble enzyme product

APPLICATION
1. Baking Industry
Xylanase AN is complex enzyme product containing exo- and endo-xylanase activities that act on soluble and insoluble flour pentosans. It is suitable for adding to bread improvers since it has synergistic effect with Fungal Amylases and Lipases. Xylanase AN improves dough structure and elasticity and increases the final volume of baked bread. The high endo-xylanase activity of Xylanase AN results in a substantial increase in hydration and contributes significantly to the texture and shelf-life of the product who remains fresh during storage.
Dosage for bakery - 2.0 - 10.0 g/100 kg flour.

2. Potential new application area of Xylanase AN is the paper and pulp industry due to its bleaching effect in the production of cellulose;

3. Xylanase AN is indispensable ingredient in premixes for animal husbandry and it is particularly important in all wheat based poultry and pig diets containing high amounts of non-starch polysaccharides (NSP’s). The use of Xylanase in wheat-based diets provides a number of advantages: improved nutrition digestibility, reduced viscosity of the intestinal content, lower water consumption and improved litter quality. The ideal digestibility of wheat based diets is improved with addition of Xylanase and as a result ileal indigestible energy is reduced. Xylanase improves the utilization of feed while reducing waste and

STORAGE
Liquid preparation - in dry and well ventilated facilities at maximum temperature 10°C
Powder or granules - in the original container, well-closed, in dry and well-ventilated facilities, protected from direct sunlight.

SHELF LIFE:
To maintain optimum enzyme activity, this product should be stored in a cool, dry place in a tightly sealed container. When properly stored, this product can be expected to lose less than 10% of its activity in twelve months for powdered form and six months for liquid preparation.

PACKING
Liquid preparation - Plastic drums of 20, 40, 60 or 120 liters.
Powder or granules - Polyethylene bags of 10, 15 and 20 kg.

ENZYME PROPERTIES
Optimum pH of action - 4.0 - 4.5
Optimum temperature of action - 50°C
pH stability - more than 80% of activity is preserved at pH between 4.0 and 5.0, at temperature of 30°C during 5 hours
Temperature stability - more than 80% of activity is preserved at temperature of 40°C during 30 min; about 50% of the activity is preserved at 50°C at the same

Biovet's enzymes are KOSHER certified products. They are produced by non-GM microorganisms.

Biovet JSC, 39 Petar Rakov St, 4550 Peshtera, Bulgaria
Tel.: + 359 350 5619, 5973, Fax: + 359 350 5636, 5607, e-mail: biovet@biovet.com, www.biovet.com