

Specification:

Product name:	VemoZyme® M – enzyme premix for feed
Composition:	Enzyme Preparation: β-Mannanase (IUB 3.2.1.78.), Xylanase (IUB No 3.2.1.8.), β-Glucanase (IUB No 3.2.1.6.), Cellulase (IUB No 3.2.1.4.), α-Amylase (IUB No 3.2.1.1.), α-Galactosidase (IUB No 3.2.1.22.), Protease (IUB No 3.2.24.28.), Lipase (IUB No 3.2.1.3.), Pectinase (IUB No 3.2.1.15.) Carrier: Calcium carbonate (CaCO ₃) and Maltodextrin

Characteristics and standards

1. Appearance	Microgranule
2. Colour	Light beige to beige
3. Taste & Odour	Specific
4. Water, %, not more than	10.0
5. Enzyme activity, U/g, not less than	
- β-Mannanase / Endo-1,4-beta-mannanase <i>Assay of endo-1,4-beta-mannanase using beta-mannazyme tablets (Megazyme) - One Unit of activity is defined as the amount of enzyme required to release one micromole of mannose reducing-sugar equivalents per minute under the defined assay conditions (pH 4.0 and temperature 40°C)</i>	400
- Xylanase / Endo-1,4-beta-xylanase <i>(One Unit is the amount of enzyme that releases low-molecular fragments from dyed xylan in amount equal to the amount of such fragments liberated from 1 unit enzyme standard under the conditions of the assay (T 50°C and pH 4.7).</i>	18 000
- β-Glucanase / Endo-1,3(4)-beta-glucanase <i>(One unit of endo-1,3(4)-beta-glucanase is defined as the enzyme needed to liberate 1 μmol reducing sugar (glucose) per minute from barley beta-glucan in condition of pH 6.8 and temperature 45°C)</i>	450
- Cellulase / Endo-1,4-beta-glucanase <i>(One unit of Celulase (CU) is defined as the enzyme needed to liberate 1 μmol reducing sugar (glucose) per minute from Na-CMC (carboxy methyl cellulose-sodium salt) in condition of pH 5.0 and temperature 50°C)</i>	1 350
- α-Amylase <i>(One unit of amylase activity (AU) is expressed through the quantity of enzyme preparation, needed to hydrolyse 1 g starch for 10 minutes, at a temperature 30°C and pH 6.0)</i>	Side activity
- Protease <i>(The proteolytic activity (PA) is expressed in tyrosine units and is defined as the quantity of enzyme preparation, which liberates 1 μg tyrosine from casein for 1 minute at 30°C and pH 7.0)</i>	Side activity
- Lipase <i>(One unit of Lipase (FIP U) is defined as the enzyme needed to liberate 1 μ equivalent of fat acids per minute in condition of pH 7.0 and temperature 37°C)</i>	Side activity
- α-Galactosidase <i>(One unit (U) will hydrolyse 1.0 mol of p-nitrophenyl-α-D-galactopyranoside to p-nitrophenol and D-galactose per minute at pH 5.5 at 37°C)</i>	Side activity
- Pectinase <i>(One unit Polygalacturonase activity is defined as enzyme needed to obtain 1 μmol galacturonic acid per 1 minute in condition of pH 5.0 and 40°C)</i>	Side activity
6. Heavy metals, mg/kg, not more than:	
- Lead (Pb)	20.0
- Arsenic (As)	15.0
- Cadmium (Cd)	2.0
- Mercury (Hg)	0.3
7. Microbiological parameters	
Total Viable Count, CFU/g, not more than	5.10 ⁴
Mould and Yeast, CFU/g, not more than	1.10 ³
E. coli, Salmonella spp., S. aureus, CFU/g	Must not be detected
8. Packaging	Polyethylene bag + paper box / bag: 25 kg
9. Storage	Store in dry and cool places, away from direct sunlight
10. Shelf life	18 months under the previously mentioned conditions in its original packaging

Application:

VemoZyme® M improves the feed digestion and assimilation. It is designed for the production of animal feeds.

Dosage: 100 g/t feed for pigs and poultry

Manufactured and controlled according to the principles and requirements of EN ISO 9001-2015, HACCP, FSSC 22000:2011, GMP, GMP+, Halal, Kosher

