


ImmunoWall™
 MOS & β Glucan

PRODUCT DESCRIPTION:

IMMUNOWALL is a prebiotic additive rich in β glucans and mannanoligosaccharides (MOS), derived from the *Saccharomyces cerevisiae* yeast cell wall.

IMMUNOWALL prevents colonization of the intestinal tract by pathogens, stimulates the immune activity of the phagocytic cells, enhances the action of beneficial bacteria such as Lactobacillus and Bifidobacteria, making an immunological wall against diseases. These effects increase the feed efficiency, increase growth rate and reduce the mortality.

WAY ACTION:

IMMUNOWALL contains purified β glucan that stimulates the endothelial reticulum. The endothelial reticulum produces high quantities of macrophages that play a key role in the immunological system.

The macrophage function is to absorb and destroy the invading particles of phagocytosis.

IMMUNOWALL is also an important mannanoligosaccharide (MOS) source, which acts in the animal intestine, binding host bacteria that attack the intestinal wall such as E. coli. MOS can be used by Lactobacillus like an energy source, increasing the beneficial bacteria growth.

TYPICAL ANALYSIS:

Crude Protein.....	%	31.30
Carbohydrate.....	%	55.76
β-Glucan (1-3,1-6).....	%	34.82
Mannanoligosaccharides.....	%	20.94
Moisture.....	%	6.07
Ash.....	%	5.05
Ether Extract.....	%	2.69
Crude Fiber.....	%	0.72

ICC GUARANTEES:
BROMATOLOGICAL ANALYSIS

Crude Protein.....	Max.	%	35.00
β-Glucan (1-3,1-6).....	Min.	%	30.00
Mannanoligosaccharides.....	Min.	%	17.00
Moisture.....	Max.	%	8.00
Ash.....	Max.	%	7.00

MICROBIOLOGICAL ANALYSIS

Total Plates Count.....	Max.	CFU/g	15,000
Total Coliforms.....	Max.	MPN/g	10
Fecal Coliforms.....	-	MPN/g	Absent
Escherichia coli.....	-	/g	Absent
Yeast.....	Max.	CFU/g	100
Mold.....	Max.	CFU/g	100
Salmonella.....	-	/25g	Absent

HEAVY METAL (TYPICAL ANALYSIS):

Aluminum.....	mg/kg	32.89
Arsenic.....	mg/kg	n.d.
Cadmium.....	mg/kg	n.d.
Lead.....	mg/kg	n.d.
Copper.....	mg/kg	2.81
Chromium.....	mg/kg	n.d.
Mercury.....	mg/kg	n.d.
Selenium.....	mg/kg	n.d.
Silica.....	mg/kg	n.d.
Sodium.....	mg/kg	2,688.37

* n.d. - not detected

DOSAGE:
POULTRY

Broilers	0.5~1.0 kg/ton. of feed
Laying hens	
-growing phase	1.0 kg/ton. of feed
-production phase	1.0 kg/ton. of feed

SWINE

Piglets	1.0~2.0 kg/ton. of feed
Growing	1.0~2.0 kg/ton. of feed
Finisher	1.0~2.0 kg/ton. of feed
Sow	1.0~2.0 kg/ton. of feed
Animals under stress	5.0 kg/ton. of feed

AQUA

Fish	1.0 kg/ton. of feed
Shrimp	1.0 kg/ton. of feed

CATTLE

Calves	5~12 g/head/day
--------	-----------------

PETS

Dogs	
Adult diets	1.0 kg/ton. of feed
Puppy diets	2.0 kg/ton. of feed
Therapeutic diets	4.0~6.0 kg/ton. of feed
Cats	
Adult diets	1.0 kg/ton. of feed
Kitten diets	2.0 kg/ton. of feed

PHYSICAL ANALYSIS:

Colour.....	Light brown
Average particle size..	100 mesh
Odor.....	Pleasant

PACKING:

25 kg multiwalled paper bags polyethylene liner.

STORAGE:

Store in a cool and dry place, free from insects.

SHELF LIFE:

24 months from production date.

QUALITY CERTIFICATION:

- **GMO FREE**