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PEPTIDASE DPP IV (*Aspergillus oryzae*)

SPECIFICATION SHEET

U.B. 3.4.11.1

DESCRIPTION

Peptidase is a food grade proteolytic enzyme preparation produced by *Aspergillus oryzae* fermentation under current GMP. Peptidase has high dipeptidyl-aminopeptidase activity in contrast to other fungal proteinase preparations. Peptidase also has high proteinase activity, and with this proteolytic combination system, it is possible to hydrolyze various proteins to high levels.

PHYSICAL PROPERTIES

A light brown to brown colored, free-flowing powder, soluble in water, free of offensive odor and taste.

ENZYMATIC PROPERTIES

The pH optimum is 7.5 with a stability range of 5.0 to 8.0. The optimum temperature is 55°C with a stability range from 40°C to 65°C. The enzyme can be inactivated at 80°C for 15 minutes.

ACTIVITY

The assay used to detect dipeptidyl-aminopeptidase IV activity (DPP IV) utilizes GLY-PRO p-nitroanilide, a hydrolyzate substrate. Dipeptidyl-aminopeptidase cleaves the p-nitroanilidic bond, liberating the p-nitroaniline. This hydrolyzate, in turn, linearly absorbs light at 405 nm wavelength. The acceptance criteria for all enzyme assays is: NLT 85.0% and NMT 115.0% of the declared units of enzyme activity.*

COUNTRY OF ORIGIN USA

STORAGE/SHELF LIFE/STANDARD PACK SIZE

Product is stable for two years (24 months) if stored at or below 10°C in sealed poly bags in boxes or drums away from sunlight and high humidity. Product is packed in 25 kilo fiber drums or double-wall boxes.

HANDLING PRECAUTIONS

Avoid the formation of aerosol and dust of the product. Repeated inhalation of enzyme aerosol or dust may cause allergic type reactions in sensitized individuals. For detailed information please refer to the SDS.

Description	Specification	Method
Activity:	NLT 60,000 DPP IV/GM	Industry
Identity:	Peptidase DPP IV	FTIR
Moisture:	NMT 10%	Ohaus MB-45
Metals:		
Lead	NMT 5 ppm	SW-846 6020
Microbiological Data:		
TPC	<10,000 CFU/g	Soleris / AOAC 990.12
E. coli	Negative/10g	Soleris / AOAC 991.14
Enterococcus	<100 CFU/g	AOAC 2003.01
Salmonella**	Negative/25g	BAM Ch. 5 / AOAC 2011.03
Yeast	<1,000 CFU/g	Soleris / AOAC 997.02
Mold	<1,000 CFU/g	Soleris / AOAC 997.02
Coliforms	<100 CFU/g	Soleris / AOAC 991.14

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**If Enterococcus test results exceed 100 CFU/g then Salmonella testing is completed.

