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AMYLASE BACTERIAL (*Bacillus amyloliquefaciens*)

SPECIFICATION SHEET

I.U.B. 3.2.1.1

DESCRIPTION

Is a highly active bacterial alpha amylase preparation derived from a selected Non-GMO strain of *Bacillus amyloliquefaciens*. The enzyme randomly hydrolyzes the alpha-D-1,4 glycosidic linkages of starch.

PHYSICAL PROPERTIES

An off white to light tan colored, fine, free-flowing powder, soluble in water, with characteristic odor and taste.

ENZYMATIC PROPERTIES

The pH stability range is 4.0 to 8.5 with an optimal pH of 6.0. The optimum temperature is 70°C with a stability range from 25°C to 80°C.

ACTIVITY

One bacterial amylase unit (BAU) is defined as that quantity of enzyme that will dextrinize starch at the rate of 1 mg/min under the specified test conditions. 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 200,000 BAU/GM	FCC
Identity:	Amylase Bacterial	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

*FCC 9 Page 414

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