



Enzymology Research Center, Inc.  
332 West Street North, Miltona, MN 56354 U.S.A  
Phone: 218.943.9127 - Fax: 218.943.9128

## SEAPROSE S<sup>®</sup> (Aspergillus melleus) Crystalline

### SPECIFICATION SHEET

I.U.B. 3.4.21.63

#### DESCRIPTION

This is a trademarked, proprietary homogenous crystalline semi-alkaline protease, manufactured using a fermentation process with a selected Non-GMO strain of *Aspergillus melleus*.

#### PHYSICAL PROPERTIES

An off white to light tan colored, free-flowing crystalline powder, soluble in water, free of offensive odor and taste.

#### ENZYMATIC PROPERTIES

The enzyme is stable in a pH range from 5.0 to 9.0 with the optimum of 8.0. The optimum temperature is 45°C with a stability range from 35°C to 50°C.

#### ACTIVITY

One proteolytic activity unit (U) is an amount of enzyme yielding a product equivalent of 1 microgram of tyrosine per minute under the reaction conditions specified. 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** Japan

#### 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 2,200 U/MG	JPSI 1991
Identity:	Seaprose S <sup>®</sup> Crystalline	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
Enteroc	<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 Enteroc test results exceed 100 CFU/g then Salmonella testing is completed.

Product Code: 81712 (10.16.17)