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## CATALASE (Aspergillus niger)

### SPECIFICATION SHEET

I.U.B. 1.11.1.6

#### DESCRIPTION

Catalase is a food grade enzyme derived from the fermentation of *Aspergillus niger*. It catalyzes the decomposition of hydrogen peroxide into water and oxygen without impacting the taste, texture or smell of the finished product.

#### PHYSICAL PROPERTIES

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

#### ENZYMATIC PROPERTIES

The pH optimum is 6.0 to 7.0 with a stability range from 5.0 to 8.5. The optimum temperature is 40°C with a stability range of 20°C to 60°C.

#### ACTIVITY

One unit (U) is defined as the amount of enzyme which can hydrolyze one micromole of 100% hydrogen peroxide in one minute at 30° C and at pH 7.0. 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 7,500 Baker Units	FCC
Identity:	Catalase	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.

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