



Enzymology Research Center, Inc.
 332 West Street North, Miltna, MN 56354 U.S.A.
 Phone: 1.218.943.9127 - Fax:1.218.943.9128

INVERTASE/SUCRASE (*Saccharomyces cerevisiae*)

SPECIFICATION SHEET

I.U.B. 3.2.1.26

DESCRIPTION

Invertase catalyzes the hydrolysis of sucrose into its component parts fructose and glucose. It is a yeast-derived enzyme from *Saccharomyces* species. It is also known as saccharase or sucrase.

PHYSICAL PROPERTIES

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

ENZYMATIC PROPERTIES

The pH optimum is 4.5 with a stability range of 2.5 to 5.5. The optimum temperature is 60°C with a stability range up to 80°C.

ACTIVITY

The activity can be valued by measuring the progress of the reduction of a sucrose solution being hydrolyzed by invertase under fixed standard conditions over a certain time interval. The activity is expressed in SU units (Sumner Units). 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 SU/GM	FCC
Identity:	Invertase/Sucrase	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 entero test results exceed 100 CFU/g then Salmonella testing is completed.