

CHYMOSIN B from *ASPERGILLUS NIGER* var. *AWAMORI* containing the PROCHYMOSIN B GENE

Prepared at the 53rd JECFA (1999) and published in FNP 52 Add 7 (1999), superseding tentative specifications prepared at the 37th JECFA (1990), published in FNP 52 (1992). ADI "Not specified" established at the 37th JECFA in 1990.

SYNONYMS	Rennin, milk-clotting enzyme, chymosin, chymosin B, aspartyl protease
C.A.S. number	85713-24-2
SOURCES	Produced extracellularly by the controlled fermentation of <i>Aspergillus niger</i> var. <i>awamori</i> containing the bovine prochymosin B gene. The strain is non-pathogenic and non-toxicogenic (for example, NRRL 3112). After inactivation of the production organism, the cellular material is removed by centrifugation or filtration. The enzyme is purified by extraction with polyethylene glycol, followed by clarification with activated carbon and separation from the solvent by cation exchange chromatography.
Active principles	Chymosin
Systematic names and numbers	None (EC 3.4.23.4)
Reactions catalyzed	Cleaves a single bond in kappa-casein
DESCRIPTION	Clear, colourless or slightly coloured aqueous solutions containing the active enzyme
FUNCTIONAL USES	Enzyme preparation Used in clotting of milk for cheese production
GENERAL SPECIFICATIONS	Must conform to the General Specifications for Enzyme Preparations used in Food Processing (see Volume Introduction)
CHARACTERISTICS	
IDENTIFICATION	
<u>Milk clotting activity</u> (Vol. 4)	The sample shows milk clotting activity