Product Specification # 20-00-1.6

"Renco for Junket"
Natural Calf Rennet Liquid
Strength - 65 IMCU/mL, minimum 92% Chymosin

Product Description:

A purified and standardised solution of milk clotting enzymes extracted from the fourth stomach of young milk fed calves. Supplied as a liquid saline solution containing a minimum of 92% chymosin as active component. Manufactured in New Zealand.

Purity:

Renco Natural Calf Rennet is purified by cellulose ion exchange chromatography. The unique chromatography step in the purification of rennet ensures a sparkling clear solution with a much lower muco-protein content than most other similar products currently available. It does not contain any deodorants or reodorants.

Strength:

The strength of Renco Natural Calf Rennet is maintained at a constant level directly related to the coagulation of whole milk. Coagulation, however, is influenced by such factors as seasonal variations affecting milk quality, additions of calcium chloride, pH or acidity variations, and the occurrence of inhibitory agents in the milk.

How to Use:

For manual addition to cheese vats it is recommended that the measured amount of rennet be diluted with 15 to 20 times its own volume of clean cold water prior to addition.

Diluting water must be free of all residual chlorine.

The usage rate of "Renco for Junket" for cheese making purposes can be expected to be in the range of 35 to 75 mL/100L of milk. For the home cheese maker this strength of rennet is approximately equivalent to the European notation of 1:6,000.

Storage:

Store in a cool dark place. The ideal storage temperature is 3 to 7℃. Containers should be kept closed. Stock should be used in rotation to maintain maximum strength.

Stability:

Under ideal storage the extract displays excellent stability properties without sedimentation. The average activity loss is 0.5% per month.

Availability:

"Renco for Junket" is available in 120 mL plastic bottles (10 bottles per display, 6 displays per shipping carton). Other pack sizes are available on request.

Animal Origin Guaranteed:

It is guaranteed that the active enzymes are obtained only from the fourth stomach of milk fed calves without the addition of any other animal or fermentation produced enzymes.

Certification:

Each batch of rennet is analysed and certified to meet the following standards at the time of manufacture:

Chemical Analysis

	Standard	**Method**
Strength :	65 IMCU/mL	IDF Standard 157:1992
pH at 20℃ :	5.6-6.1	pH meter
Salt % :	min $16^{w}/_{v}$	titration with $AgNO_3$
Sodium Benzoate :	typically 0.5%	not routinely tested
Chymosin :	min 92 %	IDF Standard 110B:1997
Pepsin :	max 08 %	IDF Standard 110B:1997
Foreign Matter	not detected	visual

Bacteriological Analysis

Standard plate count	<100/mL	Modified AS 5013.1
Anaerobic plate count	<10/mL	Renco In House
Yeasts & Moulds	< 10/mL	APHA 4th Ed. Chapter 20
Lactobacilli	< 50/mL	APHA 4th Ed. Chapter 19
Coliforms	absent in 50 mL	Modified AS 5013.3
Staphylococci (Coagulase positive)	absent in 5 mL	Modified AS 5013.12.3
Salmonella	absent in 100 mL	Modified Rappaport – Vassiliadis Soy
Listeria	absent in 100 mL	FDA Bact. Anal. Manual, 8th Ed, 1998 (mod)

Food Chemicals Codex:

Product conforms to additional requirements of FCC III, vis.,

Arsenic (as As)	< 3 ppm
Heavy metals (as Pb)	< 40 ppm
Lead	< 10 ppm
Cadmium	< 0.5 ppm
Mercury	< 0.5 ppm

Compliance:

Conforms to the requirements of the Australia New Zealand Food Standards and to the specifications of the Joint FAO/WHO Expert Committee on Food Additives (JECFA).

Not subjected to any irradiation treatment.