

Product Specification # 28-64-1.4

Bovine Liquid Pancreatin, Nominal 62,500 USP Trypsin Units/mL

Description

An aqueous food grade extract of bovine pancreas, filtered and stabilised with glycerol. The product is a slightly cloudy, dark brown liquid.

Halal certification

On request, Bovine Liquid Pancreatin may be manufactured from Halal-certified bovine pancreas and dispatched with appropriate Halal certification.

Enzyme composition

A mixture of protease, amylase and lipase enzymes. The principal endopeptidases are trypsin, chymotrypsin and elastases I and II. The principal exopeptidases are carboxypeptidase A and B.

Standardisation

Bovine Liquid Pancreatin is standardised to a proteolytic activity of approximately 62,500 USP Trypsin Units/mL, assayed as specified in USP 25.

How to Use

The product is readily miscible with water and may be dispensed by pump. Hazards associated with active proteases are reduced as Bovine Liquid Pancreatin is non-drying and non-dusting. However, normal safety precautions are still required. Avoid aerosol formation, skin and eye contact.

Storage

Freezing is recommended for long-term storage (> 3 months). For short-term storage the product may be refrigerated.

Stability

The average activity loss is 3% per month when stored refrigerated.

Availability

Available in 20 L plastic containers. Other pack sizes available on request.

Tissue origin guaranteed

The extract is prepared from certified disease-free New Zealand bovine pancreas without the addition of other animal or fermentation produced enzymes.

Chemical composition

| | |
|-------------------|------------|
| pH at 20°C | 4.5 – 5.5 |
| Glycerol | 30% (v/v) |
| Potassium sorbate | 0.1% (w/v) |

Bovine Liquid Pancreatin conforms to the following additional requirements of Food Chemicals Codex IV:

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

Bacteriological Certification

Every batch of Bovine Liquid Pancreatin is analysed and certified to comply with the following standards at the time of manufacture.

| | Specification | Method |
|------------------------------------|-----------------------|------------------------------------|
| Aerobic plate count | <500 cfu/mL | AS 5013.1 |
| Anaerobic plate count | <100 cfu/mL | APHA 4th Ed. Ch.7 |
| Yeasts and Moulds | <50 cfu/mL | APHA 4th Ed. Chapter 20 |
| Lactobacilli | <50 cfu/mL | APHA 4th Ed. Chapter 19 |
| Coliforms | <1 cfu/mL | Modified AS 5013.3 |
| Ecoli | Not detected in 50mL | Modified AS 5013.3 |
| Staphylococci (coagulase positive) | Not detected in 5mL | Modified AS 5013.12.3 |
| Salmonella | Not detected in 100mL | Modified Rappaport-Vassiliadis Soy |
| Listeria | Not detected in 100mL | FDA BAM Ch.10 (mod) |

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.