

Casein Peptone (Enzymic Digest of Casein)

Intended Use

Casein Peptone is used in the preparation of variety of culture media such as sterility testing media, diagnostic media and media for biochemical characterization.

Summary and Principle

Casein Peptone is enzymic digest of casein manufactured under controlled conditions. It is a rich source of amino nitrogen. It also contains peptides, amino acids which acts as nitrogen source for microorganisms when used in culture media.

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Note: TSE/BSE certificate is available on request.

Directions

Refer to the final concentration in the formula of the medium being prepared.

Quality Control

Test	Specification
Appearance	Brownish yellow / cream coloured powder.
Solubility	Completely soluble in water.
Colour and Clarity of 1% w/v aqueous solution after autoclaving at 15 psi / 15 min	Light yellow coloured, clear solution.
pH after autoclaving	6.5 ± 1.5
Ash Content	Not More Than 25%
Loss on Drying (Moisture Content)	Not More Than 6%
α-amino Nitrogen Content	Not Less Than 2.5%
Total Nitrogen Content	Not Less Than 7%
Total microbial count	Less than 5000 cfu/g
<i>E. coli</i>	Absent
<i>Salmonella</i>	Absent
<i>Pseudomonas aeruginosa</i>	Absent
<i>Staphylococcus aureus</i>	Absent

Cultural Response: Cultural characteristics observed after an incubation of 18-24 hours at 30°C-35°C for bacteria and 2-5 days for fungi at 20°C-25°C

Organism (ATCC)	Growth
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (6538)	Good
<i>Escherichia coli</i> (8739)	Good
<i>Pseudomonas aeruginosa</i> (9027)	Good
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good
<i>Candida albicans</i> 3147 (10231)	Good
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good

Note: Growth for *Aspergillus brasiliensis* was observed after 72 hours at 20°C-25°C for quantitative test and the same is carried out for qualitative test and confirmed characteristic growth (White mycelial growth with black spores) after 4-5 days.

Typical Analysis

NaCl (%)	0.0	Isoleucine (% Free)	1.1
Calcium (µg/g)	111	Isoleucine (% Total)	5.9
Magnesium (µg/g)	213	Leucine (% Free)	4.7
Potassium (µg/g)	3480	Leucine (% Total)	7.9
Sodium (µg/g)	34090	Lysine (% Free)	4.5
Chloride (%)	0.10	Lysine (% Total)	5.9
Sulfate (%)	0.40	Methionine (% Free)	1.1
Phosphate (%)	2.48	Methionine (% Total)	2.2
Alanine (% Free)	0.9	Phenylalanine (% Free)	2.7
Alanine (% Total)	3.4	Phenylalanine (% Total)	5.5
Arginine (% Free)	2.6	Proline (% Free)	0.3
Arginine (% Total)	2.8	Proline (% Total)	7.1
Asparagine (% Free)	0.5	Serine (% Free)	0.8
Aspartic acid (% Free)	0.2	Serine (% Total)	2.1
Aspartic acid (% Total)	5.5	Threonine (% Free)	0.5
Cystine (% Free)	*	Threonine (% Total)	1.9
Glutamic Acid (% Free)	0.9	Tryptophan (% Free)	0.8
Glutamic Acid (% Total)	16.0	Tyrosine (% Free)	0.5
Glutamine (% Free)	*	Tyrosine (% Total)	1.6
Glycine (% Free)	0.2	Valine (% Free)	1.3
Glycine (% Total)	1.7	Valine (% Total)	6.3
Histidine (% Free)	0.4		
Histidine (% Total)	1.9		

* Below level of detection

Reference

1. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The national formulary 26, Supp. 1, 8-1-08, online. United States Pharmacopeial Convention, Inc., Rockville, Md.
2. Data on file: Microexpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
202030250500	Casein Peptone (Enzymic Digest of Casein)	500 g
202030252500	Casein Peptone (Enzymic Digest of Casein)	2.5 k
202030259925	Casein Peptone (Enzymic Digest of Casein)	25 k (Bag)
202030259825	Casein Peptone (Enzymic Digest of Casein)	25 k (Drum)

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.