

Proteose Peptone

Intended Use

A nutritious ingredient used in the preparation of culture media employed for cultivation of a wide variety of microorganisms.

Summary and Principle

Proteose peptone is enzymatic digest of protein used in preparing microbiological culture media and in producing bacterial toxins. Proteose peptone provide nitrogen in a form that is readily available for bacterial growth.

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	Light yellow /Yellowish brown 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 ± 1.0
Ash Content	Not More Than 20%
Loss on Drying (Moisture Content)	Not More Than 5%
α-amino Nitrogen Content	Not Less Than 2.5%
Total Nitrogen Content	Not Less Than 10%
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> (6538)	Good
<i>Escherichia coli</i> (8739)	Good
<i>Pseudomonas aeruginosa</i> (9027)	Good
<i>Streptococcus pyogenes</i> (19615)	Good
<i>Candida albicans</i> (10231)	Good
<i>Aspergillus brasiliensis</i> (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 (%)	4.9	Leucine (% Free)	1.4
Calcium (µg/g)	120	Leucine (% Total)	5.7
Magnesium (µg/g)	261	Lysine (% Free)	0.8
Potassium (µg/g)	12780	Lysine (% Total)	4.2
Sodium (µg/g)	23110	Methionine (% Free)	0.3
Chloride (%)	2.65	Methionine (% Total)	1.4
Sulfate (%)	0.19	Phenylalanine (% Free)	1.0
Phosphate (%)	0.64	Phenylalanine (% Total)	3.6
Alanine (% Free)	0.5	Proline (% Free)	0.1
Alanine (% Total)	6.0	Proline (% Total)	4.6
Arginine (% Free)	0.4	Serine (% Free)	0.2
Arginine (% Total)	4.7	Serine (% Total)	1.7
Asparagine (% Free)	0.1	Threonine (% Free)	0.2
Aspartic acid (% Free)	0.4	Threonine (% Total)	1.5
Aspartic acid (% Total)	5.3	Tryptophan (% Free)	0.1
Cystine (% Free)	0.4	Tyrosine (% Free)	0.6
Glutamic Acid (% Free)	0.7	Tyrosine (% Total)	1.8
Glutamic Acid (% Total)	8.4	Valine (% Free)	0.2
Glutamine (% Free)	0.02	Valine (% Total)	3.7
Glycine (% Free)	0.2	Isoleucine (% Free)	0.3
Glycine (% Total)	8.2	Isoleucine (% Total)	3.3
Histidine (% Free)	0.1		
Histidine (% Total)	1.3		

Reference

1. Data on file: Microexpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
202160400500	Proteose Peptone	500 g
202160402500	Proteose Peptone	2.5 k
202160409925	Proteose Peptone	25 k (Bag)
202160409825	Proteose Peptone	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.