Peptone Type III

Intended Use
A nutritious ingredient used in the preparation of culture media for the cultivation of a wide variety of bacteria and fungi.

Summary and Principle
Peptone is used as an organic nitrogen source in microbiological culture media for cultivation of a variety of bacteria and fungi. It contains nitrogen in a form that is readily available for bacterial growth. It also has high peptone and amino acid content, with only a negligible quantity of proteoses and more complex nitrogenous constituents.

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	Specifications	
	Peptone, Bacteriological	**Peptone Type III**
Appearance	Light yellow/ yellowish brown coloured powder	Yellowish brown coloured powder
Solubility	Completely soluble in water	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	Light yellow coloured, clear solution
pH after autoclaving	6.5 ± 1.5	5.0 – 7.0
Ash Content	Not More Than 12%	Not More Than 12%
Loss on Drying (Moisture Content)	Not More Than 5%	Not More Than 5%
α – Amino Nitrogen Content	Not Less Than 2.5%	Not Less Than 3%
Total Nitrogen Content	Not Less Than 10%	Not Less Than 14%
Total Microbial Count	Less than 5000 cfu/g	Less than 5000 cfu/g
E. coli	Absent	Absent
Salmonella	Absent	Absent
Pseudomonas aeruginosa	Absent	Absent
Staphylococcus aureus	Absent	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 (Peptone, Bacteriological)	Growth (Peptone Type III)
Staphylococcus aureus subsp. *aureus* (6538)	Good	Good
Escherichia coli (8739)	Good	Good
Pseudomonas aeruginosa (9027)	Good	Good
Streptococcus pyogenes Strain Bruno (19615)	Good	Good
Candida albicans 3147 (10231)	Good	Good
Aspergillus brasiliensis WLRI 034(120) (16404)	Good	Good
Salmonella Typhi (NCTC 786)	-	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 (%)	1.7	Leucine (% Free)	1.6
Calcium (µg/g)	18	Leucine (% Total)	3.8
Magnesium (µg/g)	1	Lysine (% Free)	2.2
Potassium (µg/g)	2542	Lysine (% Total)	3.4
Sodium (µg/g)	18440	Methionine (% Free)	0.3
Chloride (%)	0.90	Methionine (% Total)	0.7
Sulfate (%)	0.32	Phenylalanine (% Free)	1.4
Phosphate (%)	0.40	Phenylalanine (% Total)	2.8
Alanine (% Free)	1.2	Proline (% Free)	0.3
Alanine (% Total)	9.2	Proline (% Total)	8.8
Arginine (% Free)	2.8	Serine (% Free)	0.4
Arginine (% Total)	5.8	Serine (% Total)	1.5
Asparagine (% Free)	0.3	Threonine (% Free)	0.3
Aspartic acid (% Free)	0.3	Threonine (% Total)	1.1
Aspartic acid (% Total)	5.0	Tryptophan (% Free)	0.3
Cystine (% Free)	*	Tyrosine (% Free)	0.5
Glutamic Acid (% Free)	0.7	Tyrosine (% Total)	0.6
Glutamic Acid (% Total)	8.1	Valine (% Free)	0.7
Glutamine (% Free)	*	Valine (% Total)	2.8
Glycine (% Free)	0.7	Isoleucine (% Free)	0.6
Glycine (% Total)	15.9	Isoleucine (% Total)	2.1
Histidine (% Free)	0.2		
Histidine (% Total)	0.8		

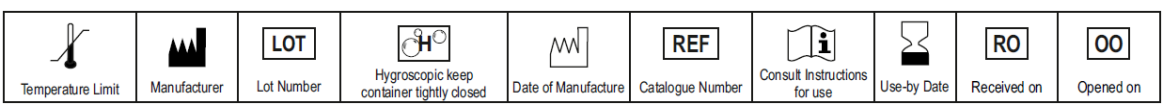
* Below level of detection

Reference

1. U.S. Food and Drug Administration. 2001. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md.
2. 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.
3. Wehr and Frank (ed.). 2004. Standard methods for the examination of dairy products, 17th ed. American Public Health Association, Washington, D.C.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
202160380500	Peptone, Bacteriological	500 g
202160382500	Peptone, Bacteriological	2.5 k
202160389925	Peptone, Bacteriological	25 k (Bag)
202160389825	Peptone, Bacteriological	25 k (Drum)
202160390500	Peptone Type III	500 g
202160392500	Peptone Type III	2.5 k
202160399925	Peptone Type III	25 k (Bag)
202160399825	Peptone Type III	25 k (Drum)



Revision: 1025/VER-03

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.