

Beef Extract Powder

Intended Use

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

Summary and Principle

Beef extract powder, derived from cara meat and dried into a powdered form, originates from the water buffalo. It serves as a rich source of nitrogen, vitamins, amino acids, and carbon in microbiological culture media. It is usually employed in concentrations of 0.3% to 1.0% in culture media. The cara beef extract products are replacements for infusion of meat.

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

Appearance

Solubility

Colour and Clarity of 1% w/v aqueous solution after autoclaving at 15 psi / 15 min.

pH after autoclaving

Ash Content

Loss on Drying (Moisture Content)

α-amino Nitrogen Content

Total Nitrogen Content

Total microbial count

E. coli

Salmonella

Staphylococcus aureus

Pseudomonas

Specification

White/ cream/ light yellow/ yellow/ brownish yellow coloured powder.

Completely soluble in water.

Colourless/ Light yellow/ yellow/ dark yellow/ light amber/ amber/ dark amber coloured, clear solution.

6.5 ± 1.0

Not More Than 20%

Not More Than 6%

Not Less Than 2.5%

Not Less Than 8%

Less than 5000 cfu/g

Absent

Absent

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)

Staphylococcus aureus subsp. *aureus* (6538)

Escherichia coli (8739)

Pseudomonas aeruginosa (9027)

Streptococcus pyogenes Strain Bruno (19615)

Candida albicans 3147 (10231)

Aspergillus brasiliensis WLRI 034(120) (16404)

Growth

Good

Good

Good

Good

Good

Good

Note: Growth for *Aspergillus brasiliensis* WLRI 034(120) 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 (%)	0.3	Isoleucine (% Free)	1.3
Calcium (µg/g)	264	Isoleucine (% Total)	5.1
Magnesium (µg/g)	285	Leucine (% Free)	3.8
Potassium (µg/g)	28793	Leucine (% Total)	7.2
Sodium (µg/g)	18510	Lysine (% Free)	4.0
Chloride (%)	*	Lysine (% Total)	5.7
Sulfate (%)	0.53	Methionine (% Free)	0.8
Phosphate (%)	3.22	Methionine (% Total)	1.6
Alanine (% Free)	1.8	Phenylalanine (%Free)	2.5
Alanine (% Total)	4.0	Phenylalanine	5.0
Arginine (% Free)	2.8 (% Total)		
Arginine (% Total)	2.8	Proline (% Free)	0.3
Asparagine (% Free)	0.6	Proline (% Total)	5.7
Aspartic acid (% Free)	0.6	Serine (% Free)	0.8
Aspartic acid (% Total)	5.5	Serine (% Total)	2.1
Cystine (% Free)	0.2	Threonine (% Free)	0.6
Glutamic Acid (% Free)	2.5	Threonine (% Total)	1.8
Glutamic Acid (% Total)	14.6	Tryptophan	0.7
Glutamine (% Free)	0.1 (% Free)		
Glycine (% Free)	0.5	Tyrosine (% Free)	0.6
Glycine (% Total)	2.3	Tyrosine (% Total)	1.5
Histidine (% Free)	0.4	Valine (% Free)	1.4
Histidine (% Total)	2.1	Valine (% Total)	5.4

* Below level of detection

Reference

1. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The national formulary 26, Supp. 1, 8-108, online. United States Pharmacopeial Convention, Inc., Rockville, Md.
2. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
202020430500	Beef Extract Powder	500 g
202020432500	Beef Extract Powder	2.5 k
202020439925	Beef Extract Powder	25 k (Bag)
202020439825	Beef Extract Powder	25 k (Drum)

									
Temperature Limit	Manufacturer	Lot Number	Hygroscopic keep container tightly closed	Date of Manufacture	Catalogue Number	Consult Instructions for use	Use-by Date	Received on	Opened on

Revision: 0726/VER-04

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.