

## 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

- 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.
- Data on file: Microxpress®, 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) |

|   |   |            |   |                     |                              |  |             |             |           |
|---|---|------------|---|---------------------|------------------------------|--|-------------|-------------|-----------|
|  |  | <b>LOT</b> |  | Date of Manufacture | <b>REF</b>                   |  | Use-by Date | <b>RO</b>   | Opened on |
| Temperature Limit   | Manufacturer  | Lot Number | Hygroscopic keep container tightly closed   | Catalogue Number    | Consult Instructions for use |  |             | Received on |           |

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.