

Czapek Yeast Extract Agar

Intended Use

Czapek Yeast Extract Agar is recommended for the cultivation and maintenance of *Aspergillus brasiliensis*.

Summary

Aspergillus brasiliensis is one of the most common species of the genus *Aspergillus* belongs to the group Ascomycota, and ubiquitously presents in soil. *Aspergillus brasiliensis* is cultured for the industrial production of many substances like citric acid and gluconic acid. These substances have been checked for daily intake by the World Health Organisation. Many enzymes are also produced using *Aspergillus brasiliensis*. These include glucoamylase and α-galactosidase, and other medications which claim to prevent flatulence. Another use of *Aspergillus brasiliensis* in the biotechnology industry is in the production of magnetic isotope-containing variants of biological macromolecules for NMR analysis.

Principle

Czapek Yeast Extract Agar is recommended for the cultivation and maintenance of *Aspergillus brasiliensis*. This medium supports the abundant growth of almost all saprophytic Aspergilli. Sucrose serves as the source of energy. Yeast extract provides essential amino acids, vitamins and other essential nutrients. Sodium nitrate serves as the nitrogen sources. The various salts buffer the medium in addition to supplying essential ions to the growing fungi.

Formula*

Ingredients	g/L
Sucrose	30.0
Yeast Extract	5.0
Dipotassium Hydrogen Phosphate	1.0
Sodium Nitrate	0.3
Potassium Chloride	0.05
Magnesium Sulphate	0.05
Ferrous Sulphate	0.001
Zinc Sulphate	0.001
Copper Sulphate	0.0005
Agar	15.0
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 15-30°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen

Pharmaceuticals, Food and Dairy samples

Directions

1. Suspend 51.40 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Cool to 45°C - 50°C.
5. Mix well and pour into sterile petridishes.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogeneous, free flowing powder.

Prepared Appearance: Light yellow coloured, clear to slightly opalescent gel with a slight precipitate forms in petridishes.

Cultural Response: Cultural characteristics observed after an incubation at 20°C - 25°C for 48-72 hours.

Organism (ATCC)	Growth
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good

Note: For good growth - Growth obtained on test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.

Growth for *Aspergillus brasiliensis* is 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.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. Atlas R. M., 2004, Handbook of Microbiological Media 3rd Edition, CRC Press.
3. Thom and Raper, 1945, Manual of Aspergilli, 39.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201031100500	Dehydrated Culture Media	500 g

 Temperature Limit	 Manufacturer	 LOT	 Batch Code	 Date of Manufacture	 This way up	 RO Received on
REF Catalogue Number	 Consult Instructions for use	 Use-by Date	 Hygroscopic keep container tightly closed	OO Opened on		

Revision: 0126/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.