

PRODUCT CODE: 413758

Potato Glucose Agar (Ph. Eur.) (Dehydrated Culture Media) for microbiology

Preparation

Suspend 39 g of powder in 1 l of distilled water and bring to the boil. Distribute into suitable containers and sterilise in the autoclave at 121°C for 15 minutes. Do not overheat. Cool to 45-50°C, mix well and dispense into plates. Distribute the diluted samples into sterile Petri plates. Pour molten agar cooled to 45-50 °C in the plates and gently mix to homogenise the mixture. After solidification, plates are incubated for 5-7 days at 20-25 °C to permit the complete development of the fungal colonies.

Uses

POTATO DEXTROSE AGAR is a weakly selective medium for fungi due to its high sugar content and acidic pH. Pigment production and aerial mycelium development is enhanced by the potato peptone, especially in *Fusarium*, *Aspergillus* and *Penicillium* species.

The selectivity can be increased by adding antibiotics such as chloramphenicol or tetracycline, or by simply decreasing the pH to an acidic level. At pH 3,5 bacterial growth is almost totally inhibited without a significant effect on fungi. This acidification can be obtained by the aseptic addition of an adequate amount of organic acid to the medium after sterilisation: 10-15 mL/L of a 10% sterile solution of tartaric or lactic acid is usually sufficient. After its acidification the medium should not be overheated or reheated since it can hydrolyse the agar causing a potential loss in the solidification property of the medium.

Composition

See in Data Sheet (TDS).

Microbiological Test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 20-25°C and observed after 48 hours to 5-7 days.

Inoculum: Practical range 100 ±20 CFU. Min. 50 CFU (productivity), according to ISO 11133:2014 and Ph. Eur. Spiral Plate Method.

Microorganism	Growth	Remarks
<i>Candida albicans</i> ATCC® 10231	Productivity > 0.70	-
<i>Saccharomyces cerevisiae</i> ATCC® 9763	Productivity > 0.70	-
<i>Aspergillus brasiliensis</i> ATCC® 16404	Productivity > 0.70	Black sporulation at 5 days

Storage

Keep tightly closed, away from light, in a dry place (4-30 °C).

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