TECHNICAL DATA SHEET

Article No. 8992

Potato Dextrose Agar Ph. Eur.

SYNONYMS

PDA, PD1

SPECIFICATION

Culture medium for the detection and enumeration of yeastand moulds in food, dairy products and other samples, according to the Pharmacopeial Harmonized Methods.

FORMULA* IN G/L

Potato peptone	4.0 (1)
Glucose	20.0
Agar	15.0

Final pH 5.6 ±0.2 at 25 °C

(1) Equivalent to 200 g infusion from potatoes.

*Adjusted and/or supplemented as required to meet performance criteria.

DIRECTIONS

Suspend 39 g of powder in 1 l of distilled water and heat to boiling. Distribute into suitable containers and sterilize by autoclaving at 121 °C for 15 minutes.

DESCRIPTION

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 sterilization: 10-15 ml/l of a 10 % sterile solution of tartaric or lactic acid is usually sufficient.

Th. Geyer GmbH & Co. KG

Dornierstr. 4 – 6
D-71272 Renningen
Tel.: +49 7159 1637-0
Fax: +49 7159 1637-710
renningen@thgeyer.de
www.thgeyer.de

BW-Bank (Swift/BIC SOLADEST600)
IBAN DE85600501010002036302
Postbank Stuttgart (Swift/BIC PBNKDEFFXXX)
IBAN DE32600100700000020708
Deutsche Bank (Swift/BIC DEUTDESSXXX)
IBAN DE06600700700125518100

St.-Nr. 70093/40018 / USt-IdNr. DE147510304
Amtsgericht Stuttgart / HRA-Nr. 254140
Persönlich haftende Gesellschafterin:
Geyer Beteiligungsgesellschaft mbH
Amtsgericht Stuttgart / HRB-Nr. 252035
Geschäftsführer: Lutz-Alexander Geyer / Thomas Roth

After its acidification the medium should not be overheated or reheated since it can hydrolyse the agar causing a pontential loss in the solidification property of the medium.

TECHNIQUE

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.

QUALITY CONTROL

- Incubation temperature: 20-25 °C
- Incubation time: 48 h/5-7 d
- Inoculum: Practical range 100 ±20 CFU. Min. 50 CFU (productivity), according to ISO 11133:2014 and Ph. Eur. Spiral Plate Method.

Microorganism	Growth	Remarks
Candida albicans ATCC® 10231	Productivity >0.70	None
Saccharomyces cerevisiae ATCC® 9763	Productivity >0.70	None
Aspergillus brasiliensis ATCC® 16404	Productivity >0.70	5 d (black sporulation)

REFERENCES

- ATLAS R.M. (1995) Handbook of Microbiological Media for the Examination of Food. CRC Press. Boca Raton. Florida. USA.
- EUROPEAN PHARMACOPOEIA 8.0 (2014) 8th ed. § 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. EDQM. Council of Europe. Strasbourg.
- ISO 11133:2014. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- RICHARDSON, G.H. (1985) Standard Methods for the examination of dairy products 15th ed. APHA. Washington.
- USP 33 - NF 28 (2011) <62> Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.
- VANDERZANT, C. & D.F. SPLITTSTOESSER (1992) Compendium of methods for the microbiological examination of foods. 3rd ed. APHA. Washington.

STORAGE

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

Th. Geyer GmbH & Co. KG

Dornierstr. 4 – 6
D-71272 Renningen
Tel.: +49 7159 1637-0
Fax: +49 7159 1637-710
renningen@thgeyer.de
www.thgeyer.de

BW-Bank (Swift/BIC SOLADEST600)
IBAN DE85600501010002036302
Postbank Stuttgart (Swift/BIC PBNKDEFFXXX)
IBAN DE32600100700000020708
Deutsche Bank (Swift/BIC DEUTDESSXXX)
IBAN DE06600700700125518100

St.-Nr. 70093/40018 / USt-IdNr. DE147510304
Amtsgericht Stuttgart / HRA-Nr. 254140
Persönlich haftende Gesellschafterin:
Geyer Beteiligungsgesellschaft mbH
Amtsgericht Stuttgart / HRB-Nr. 252035
Geschäftsführer: Lutz-Alexander Geyer / Thomas Roth

SHELF LIFE

5 years from date of production.

Th. Geyer GmbH & Co. KG

Dornierstr. 4 – 6
D-71272 Renningen
Tel.: +49 7159 1637-0
Fax: +49 7159 1637-710
renningen@thgeyer.de
www.thgeyer.de

BW-Bank (Swift/BIC SOLADEST600)
IBAN DE85600501010002036302
Postbank Stuttgart (Swift/BIC PBNKDEFFXXX)
IBAN DE32600100700000020708
Deutsche Bank (Swift/BIC DEUTDESSXXX)
IBAN DE06600700700125518100

St.-Nr. 70093/40018 / USt-IdNr. DE147510304
Amtsgericht Stuttgart / HRA-Nr. 254140
Persönlich haftende Gesellschafterin:
Geyer Beteiligungsgesellschaft mbH
Amtsgericht Stuttgart / HRB-Nr. 252035
Geschäftsführer: Lutz-Alexander Geyer / Thomas Roth