



Potato Dextrose Agar

LAB 98

Description

Potato Dextrose Agar is recommended by the American Public Health Association for the enumeration of yeasts and moulds in examination of dairy products, soft drinks, dried and frozen foods and other types of product. Depending on whether the medium is to be used as a selective or non-selective agar it can be used with or without acidification.

Formula	g/litre
Potato Extract	4.0
Dextrose	20.0
Agar No. 1	15.0

Method for reconstitution

Weigh 39 grams of powder, disperse in 1 litre of deionised water, then sterilise at 121°C for 15 minutes. Mix well before pouring into sterile Petri dishes. In certain cases it may be desirable to lower the pH of the medium to 3.5 in order to suppress bacterial growth. This can be done by adding 10ml of sterile 10% Lactic Acid X037, to one litre of Potato Dextrose Agar LAB 98. This addition must be after autoclaving and cooling to 47°C. Once the pH has been lowered the medium may not be heated again without resultant loss of gel strength caused by agar hydrolysis.

Appearance: Translucent white agar.

pH: 5.6 ± 0.2 (3.5-4.0 if X037 is added)

Minimum Q.C. organisms: *Aspergillus* sp. NCIMB 50097
Saccharomyces cerevisiae

Storage of Prepared Medium: Plates – up to 7 days at 2-8°C in the dark. Capped containers – up to 1 month at 15-20°C in the dark.

Inoculum: Pour plate technique.

Incubation: 21°C aerobically for 5 days.

Growth Characteristics			
organism	colony size (mm)	shape & surface	colour
<i>Candida</i> spp.	2.0	C.V.E.D.	White
<i>Candida krusei</i>	2.0	F.Rz.D.	Grey/White
<i>Tryc. mentagrophytes</i>	4.0	Fluffy White	Yellow obverse
<i>Tryc. verrucosum</i>	5.0	Fluffy White	Yellow obverse
<i>Toro. glabrata</i>	3.0	C.V.E.G.	White
<i>Asp. niger</i>	4.0	Black spores centre White surround	Yellow obverse
<i>Pen. notatum</i>	4.0	Green spores centre White surround	Green obverse

References

Association of Official Analytical Chemists (AOAC). Bacteriological Analytical Manual, 5th ed. (1978). Washington D.C. Hausler, W.J. (ed.).

Standard Methods for the Examination of Dairy Prod. 14th edn., Washington D.C.: American Public Health Association, (1976).