

Plate Count Agar

LAB 149

Description

A medium designed for use with the spiral plating system and other surface inoculation techniques. The formula is equivalent to A.P.H.A. Plate Count Agar and is suitable for the determination of total viable counts in food products by surface count and pour plate methods.

Formula	g/litre
Tryptone	5.0
Yeast Extract	2.5
Glucose	1.0
Agar No. 2	12.0

Method for reconstitution

Weigh 20.5 grams of powder, disperse in 1 litre of deionised water. Allow to soak for 10 minutes, swirl to mix then sterilise by autoclaving at 121°C for 15 minutes. Cool to 47°C then pour into Petri dishes.

Appearance: Pale straw colour, clear.

pH: 7.0 ± 0.2

<u>Minimum Q.C. organisms:</u> S. epidermidis NCIMB 50082 E. coli NCIMB 50034

Storage of Prepared Medium: Plates – up to 7 days at 2-8°C in the dark.

Inoculation: Surface, or pour plate.

Incubation: 30°C aerobically for 48 hours for aerobic mesotroph count. 6°C aerobically for 10 days for aerobic psychrotroph count. 55°C aerobically for 48 hours for aerobic thermotroph count.

Interpretation: Count all colonies or use spiral plating colony count equipment.

References

Reasoner, D.J., Geldreich, E.E. (1985) A New Medium for the Enumeration and Subculture of Bacteria from potable water. App & Env. Microbiol. Jan. 1985 p.1-7.

American Public Health Association (1985) Standard Methods for the Enumeration of Water and Wastewater. 16th Edition. American Public Health Association Inc. Washington D.C.

Environment Agency: The Microbiology of Drinking Water (2002). Methods for the Examination of Water and Associated Materials.