

TM 2285 – PLATE COUNT AGAR W/O DEXTROSE

INTENDED USE

Recommended for the determination of plate counts of microorganisms in water samples.

PRODUCT SUMMARY AND EXPLANATION

Plate Count Agar is formulated as described by Buchbinder et al which is recommended by APHA and FDA. Plate Count Agar w/o Dextrose is recommended for the detection of plate counts in water sample.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	5.000
Yeast extract	2.500
Agar	15.000

PRINCIPLE

This medium consists of Tryptone which provides nitrogenous and carbonaceous compounds, long chain amino acids and other essential growth nutrients. Yeast extract supplies Vitamin B complex. APHA recommends the use of pour plate technique. The samples are diluted and appropriate dilutions are added in Petri plates. Sterile molten agar is added to these plates and plates are rotated gently to ensure uniform mixing of the sample with agar. The poured plate count method is preferred to the surface inoculation method, since it gives higher results.

INSTRUCTION FOR USE

- Dissolve 22.5 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Light yellow coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation at 34-38°C for 40- 48 hours and 20-24°C for 64-72 hours.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery
<i>Bacillus subtilis subsp. spizizenii</i>	6633	50-100	Luxuriant	≥70 %



<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	>=70 %
<i>Escherichia coli</i>	25922	50-100	Luxuriant	>=70 %
<i>Staphylococcus aureus subsp. aureus</i>	25923	50-100	Luxuriant	>=70 %
<i>Candida albicans</i>	10231	10-100	Luxuriant	>=70 %
<i>Aspergillus niger</i>	16404	10-100	Luxuriant	>=70 %

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.










DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
2. Buchbinder L., Baris Y., Aldd E., Reynolds E., Dilon E., Pessin V., Pincas L. and Strauss A., 1951, Publ. Hlth. Rep., 66:327.
3. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
5. Jorgensen, J.H, Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.



 GMP Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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