

TM 2133 - HIGH PLATE COUNT AGAR

INTENDED USE

For obtaining higher colony counts by spread plate or pour plate or membrane filter technique.

PRODUCT SUMMARY AND EXPLANATION

The heterotrophic plate count (HPC), formerly known as the standard plate count is a procedure for estimating the numbers of live heterotrophic bacteria in water and measuring the changes during water treatment and distribution or in swimming pools. Different methods namely pour plate method, spread plate method and membrane filter method can be followed to obtain heterotrophic plate count. High Plate Count Agar is recommended by APHA for determining heterotrophic plate count. This low nutrient medium is likely to produce higher colony counts than high nutrient media.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	3.000
Casein soluble	0.500
Dipotassium hydrogen phosphate	0.200
Magnesium sulphate	0.050
Iron (III) Chloride	0.001
Agar	15.000

PRINCIPLE

Peptone and Casein soluble provide the necessary nitrogenous compounds for the growth of heterotrophic microorganisms. Metallic salts and dipotassium phosphate together with Peptone and M-Protein soluble promotes the growth of higher number of microorganisms. Refer appropriate references for standard procedures.

INSTRUCTION FOR USE

- Dissolve 18.75 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.
- 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)	: 7.2±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period



<i>Bacillus subtilis</i> subsp. <i>spizizenii</i>	6633	50-100	Luxuriant	>=70%	35 - 37°C	18-24 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	>=70%	35 - 37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	>=70%	35 - 37°C	18-24 Hours
<i>Lactobacillus casei</i>	9595	50-100	Luxuriant	>=70%	35 - 37°C	18-24 Hours
<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	25923	50-100	Luxuriant	>=70%	35 - 37°C	18-24 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant	>=70%	35 - 37°C	18-24 Hours

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. RB. Bai. 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. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. 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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