CM 22154 - PLATE COUNT AGAR (IS: 5402 – 1969)

INTENDED USE

For determination of microbial counts in food,water and waste water by pour plate technique.

PRODUCT SUMMARY ANDEXPLANATION

Plate counta gar is usedfor determinationofplate counts of microorganisms from samples. This media was formulated and described by Buchbinder et al. Plate countagar is also suitable for determining bacterial count in food, water, milk and milk products indicating microbial contamination. This present formula complies with the specifications given by IS: 5402 – 1969. The BIS recommends pour platetechnique with this culture medium.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Sodium chloride	6.500
Casein enzymic hydrolysate	5.000
Yeast extract	2.500
Dextrose	1.000

PRINCIPLE

Themedium contains Caseinenzymic hydrolysate which provides amino acids and other complex nitrogenous substances. Yeast extractsupplies Vitamin B complex. Dextrose serves as a carbon source and Agar acts as a solidifying agent. Sodium chloride isaddedfor maintaining the osmotic balance.

INSTRUCTIONFOR USE

Dissolve 30.00grams in 1000ml distilled water.
Gently heat toboiling with gentle swirling and dissolve the medium completely.
Sterilize by autoclaving at 15 psi (121°C) for 15 minutes
Cool to 45-50°Cbefore use.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Cream to yellow coloured, homogeneous free flowing powder
Appearance of Prepared medium	:	Light yellow colored, clear to slightly opalescent gel
pH (at 25°C)	:	7.0± 0.2

INTERPRETATION

Culturalcharacteristics observed after an incubation.Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	>=70%	35-37°C	18-24 hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 hours
Lactobacillus casei	9595	50-100	Luxuriant	>=70%	35-37°C	18-24 hours

Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	35-37°C	18-24 hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	35-37°C	18-24 hours
Enterococcus faecalis	29212	50-100	Luxuriant	>=70%	35-37°C	18-24 hours

PACKAGING

In100&500gmpackaging size.

STORAGE

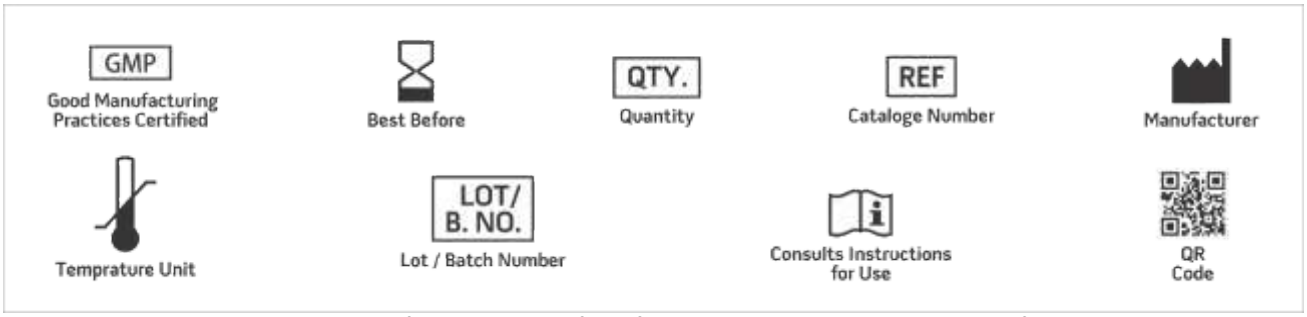
Dehydratedpowder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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 powder if they show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

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

REFERENCES

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 14th ed., APHA Inc., Washington, D.C. (1978).
2. Bureau of Indian Standards, IS : 5402 - 1969 (First Reprint 1983).
3. Buchbinder L., Baris Y., Aldd E., Reynolds E., Dilon E., Pessin V., Pincas L. and Strauss A., 1951, Publ. Hlth. Rep., 66:327.
4. U.S. Food and Drug Administration, 1995, Bacteriological Analytical Manual, 8th ed., AOAC, Arlington, Va.



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