

CM 21417 - STANDARD METHODS AGAR (PLATE COUNT AGAR) (ISO 4833-1 & 2:2013)

INTENDED USE

For determination of plate counts of microorganisms in foods, water, waste water and also from clinical samples.

PRODUCT SUMMARY AND EXPLANATION

Plate count agar is used for determination of plate counts of microorganisms from samples. This media was formulated and described by Buchbinder et al. Plate count agar is also suitable for determining bacterial count in food and water, indicating microbial contamination. This culture medium complies with the specifications given by ISO 4833-1 & 2:2013 and APHA.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Tryptone	5.000
Yeast extract	2.500
Dextrose	1.000

PRINCIPLE

The medium consists of Tryptone which provides nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly the B-group. Dextrose is the fermentable sugar providing carbon and energy. Agar acts as a solidifying agent.

INSTRUCTION FOR USE

Dissolve 23.50 grams in 1000ml distilled water.

Gently heat to boiling with gentle swirling to dissolve the medium completely.

Sterilize by autoclaving at 15 psi (121°C) for 15 minutes

Cool to 45-50°C.

Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Cream to yellow, 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

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	≥70%	35-37°C	18-48 Hours
Escherichia coli	25922	50-100	Luxuriant	≥70%	35-37°C	18-48 Hours



Lactobacillus casei	9595	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Enterococcus faecalis	29212	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours

PACKAGING:

In 100 & 500 gm packaging size.

STORAGE

Dehydrated powder, 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.

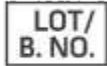
Product Deterioration: Do not use powder if they show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

After use, 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. E.W. Frampton, et al., Comparison of β -glucuronidase and indole-based direct plating methods for enumeration of unstressed E. coli, (1990). J. Food Protect. 53, 933.
3. Buchbinder L., Baris Y., Alder E., Reynolds E., Dillon E., Pessin V., Pincas L. and Strauss A., 1951, Publ. Hlth. Rep., 66:327.

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

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