

# TMP 007GT - PLATE COUNT AGAR (γ- IRRADIATED) (TRIPLE PACK)

## **INTENDED USE**

For determination of plate counts of microorganisms in food, water and waste water.

## **PRODUCT SUMMARY AND EXPLANATION**

Plate Count Agar is formulated as described by Buchbinder et al which is recommended by APHA and FDA. The poured plate count method is preferred to the surface inoculation method, since it gives higher results. Plate Count Agar is also suitable for enumerating bacterial count of sterile rooms.

The media are gamma irradiated in the packaging material to assure a reduction of the microbial load potentially present in the medium, on the dishes, and on the packaging materials.

# COMPOSITION

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

## PRINCIPLE

Tryptone provides nitrogenous and carbonaceous compounds, long chain amino acids, and other essential 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.

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## **INSTRUCTION FOR USE**

Either streak, inoculate or surface spread the test inoculum aseptically on the plate.

## QUALITY CONTROL SPECIFICATIONS

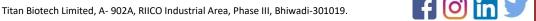
Appearance Quantity of Medium pH (at 25°C) Dose of Irradiation Sterility Check

- Light yellow colored medium,
- 25ml of medium in 90mm plates.
- 7.0± 0.2
- : 15.0-25.0 kGy
- : Passes release criteria

#### INTERPRETATION

Cultural response was observed after incubation.

Microorganism	ATCC	lnoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Bacillus subtilis subsp. spizizenni	6633	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Enterococcus faecalis	29212	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours





# **PRODUCT DATA SHEET**

Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Lactobacillus casei	9595	50-100	Luxuriant	>=70%	35-37° C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours

## PACKAGING:

Triple layered packing containing 5 number of plates with one silica gel desiccant bag packed inside it.

## STORAGE

On receipt, store the plates at 15–30 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

**Product Deterioration:** Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or 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. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C
- 5. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.













Manufacturer





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Consults Instructions for use :

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NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only Revision: 22<sup>nd</sup> March., 2022

