
PLATE COUNT AGAR

(Standard Methods Agar) (TGY)

INTENDED USE

Remel Plate Count Agar (Standard Methods Agar) (TGY) is a solid medium recommended for use in the enumeration of microbial plate counts from milk, dairy products, food, water, and other specimens of sanitary importance.

SUMMARY AND EXPLANATION

The medium is a modification of Tryptone Glucose Extract Milk Agar described by Bowers and Hucker for standard plate counts.¹ The milk was eliminated to provide a medium free from precipitate, to achieve a clearer background, and to produce larger colonies. The present formulation, Tryptone Glucose Yeast Extract (TGY) Agar, conforms to the formulation specified by the Association of Official Analytical Chemists (AOAC), the American Public Health Association (APHA), and in *Standard Methods for the Examination of Water and Wastewater*.²⁻⁵ It is also recommended by the Environmental Protection Agency, the United States Department of Agriculture, and the International Dairy Federation.

PRINCIPLE

The casein peptone in this medium provides the nutrients necessary to support bacterial growth. Yeast extract is the source of B-complex vitamins and dextrose is the energy source.

REAGENTS (CLASSICAL FORMULA)*

Casein Peptone.....	5.0 g	Dextrose	1.0 g
Yeast Extract.....	2.5 g	Agar.....	15.0 g
		Demineralized water.....	1000.0 ml

pH 7.0 ± 0.2 @ 25°C

*Adjusted as required to meet performance standards.

PROCEDURE

Consult appropriate references for information regarding the processing and inoculation of food, water samples, and other materials. Follow recommended procedures for the counting of colonies.²⁻⁵

Pour Tube: Melt the agar deep in a boiling water bath and cool to 45-50°C. Mix and dispense into a sterile petri dish and proceed with the instructions above.

QUALITY CONTROL

Each lot number of Plate Count Agar (Standard Methods Agar) (TGY) has been manufactured, packaged, and processed in accordance with current Good Manufacturing Practice regulations. All lot numbers have been tested using the following quality control organisms and have been found to be acceptable. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, sample results should not be reported.

CONTROL

Escherichia coli ATCC® 25922
Pseudomonas aeruginosa ATCC® 27853
Staphylococcus aureus ATCC® 25923

INCUBATION

Aerobic, 18-24 h @ 33-37°C
Aerobic, 18-24 h @ 33-37°C
Aerobic, 18-24 h @ 33-37°C

RESULTS

Growth
Growth
Growth

BIBLIOGRAPHY

1. Bowers, C.S. and G.J. Hucker. 1935. Tech. Bull. No. 228. N.Y. State Agric. Exp. Stn., Geneva, N.Y.
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3. Downes, F.P. and K. Ito. 2001. Compendium of Methods for the Microbiological Examination of Foods. 4th ed. APHA, Washington, D.C.
4. Wehr, H.M. and J.F. Frank. 2004. Standard Methods for the Examination of Dairy Products. 17th ed. APHA, Washington, D.C.
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Refer to the front of Remel *Technical Manual of Microbiological Media* for **General Information** regarding precautions, product storage and deterioration, specimen collection, storage and transportation, materials required, quality control, and limitations.

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