

CM 20452 - CHROMOGENIC ENTEROCOCCI BROTH

INTENDED USE

For identification and differentiation of Enterococci from water.

PRODUCT SUMMARY AND EXPLANATION

Chromogenic Enterococcus Broth is used for rapid identification and differentiation of Enterococci from water samples. This medium is being formulated by Manafi and Sommer, Althous et al, Amoras and Litsky et al. The presence of Enterococcus group, which is a subgroup of the faecal Streptococci, serves as a valuable bacterial indicator for determining the extent of faecal contamination and it is more specific than the detection of coliforms, which may originate from non-faecal sources.

COMPOSITION

Ingredients	Gms / Ltr
Peptone, special	10.000
Sodium chloride	5.000
Polysorbate 80	2.00
Sodium hydrogen phosphate	1.25
Sodium azide	0.30
Chromogenic mixture	0.04

PRINCIPLE

This medium contains Peptone, special as a source of nitrogen and other growth nutrients. Osmotic equilibrium is maintained by Sodium chloride. The enzyme by β -glucosidase produced by Enterococci cleaves the chromogenic substrate resulting in a bluish green colour. Sodium azide makes the media selective by inhibiting the accompanying microflora, especially gram negative organisms. Polysorbate 80 acts as a source of fatty acids.

INSTRUCTION FOR USE

Dissolve 18.59 grams* in 1000 ml distilled water.

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

Distribute into tubes or flasks as desired.

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

Cool the tubes to room temperature before inoculation.

Note: * 18.59 grams in 1000 ml distilled water is recommended for preparation of single strength medium. Whereas, 39.18 grams in 1000 ml distilled water for preparation of double strength medium.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	:	Cream to yellow homogeneous free flowing powder
Appearance of prepared medium	:	Light amber coloured, clear solution in tubes.
pH (at 25°C)	:	7.5 ± 0.2

INTERPRETATION

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

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of medium	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Luxuriant	Light Blue-green	35-37°C	24-48 Hours



Escherichia coli	25922	50-100	None-poor	Light Yellow	35-37°C	24-48 Hours
Staphylococcus aureus	25923	50-100	None-poor	Light Yellow	35-37°C	24-48 Hours
Pseudomonas aeruginosa	27853	50-100	None-poor	Light Yellow	35-37°C	24-48 Hours

PACKAGING

In pack size of 100gm & 500gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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 powder 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. Althous, H., Dott, W., Havemeister, G, Muller, H.E, a. Sacre, C., 1982, Zbl. Bakt. Hyg. I. Abt. Orig. A. 252:154-165.
2. Amoras I, 1995, Poster presentation congress of Spanish Society of Microbiology, Madrid.
3. Litsky, W., Mallmann, W.L., a Fifield, C.W. 1953, Amer. J. Pbl. Hlth. 43:873-879.
4. Manafi M., and Sommer R, 1993, Wat. Sci. Tech. 27:271-274.
5. Snyder M.L., and Lichstein, H.C. 1940, J. Infect. Dis. 67. 113-115
6. Standard Methods for the Examination of Water and Wastewater, 20th Edition, Edited by L.S. Clesceri, A.E. Greenberg and A.D. Eaton, Published by APHA, AWWA and WEF (1998).

 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

