CM 20627 – ECD AGAR

INTENDED USE

For selective isolation of coliforms, especially E.coli in water & food by membrane filter technique.

PRODUCT SUMMARY AND EXPLANATION

ECD Agar is used for detectionof coliforms, especially, Escherichia coli in water, food and other samples using membrane filter technique. The water sample is filtered through filter membranes, which are then placed on ECD Agar and incubated overnight. Lay a drop of Kovac's Indole Reagent on the colonies. Indole positive colonies form a red zone around the colony. Indole positive colonies are enumerated as E.coli.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	20.000
Yeast extract	5.000
Bile salts	1.500
Sodium chloride	5.000
Disodium hydrogen phosphate	5.000
Potassium dihydrogen phosphate	1.500
Agar	15.000

PRINCIPLE

The medium consists of tryptone and yeast extract which provide essential nutrients especially nitrogenous sources for the coliforms. Bile salts selectively inhibit gram-positive organisms. Sodium chloride maintains the osmotic balance while phosphate salts buffer the medium.

INSTRUCTION FOR USE

Dissolve 53.0gramsin 1000 ml purified / distilled water.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50° C.
Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Good-luxuriant	>=50%	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	>=10^3	Good-luxuriant	>=50%	35-37°C	18-24 Hours
Salmonella Typhi	6539	50-100	Good-luxuriant	>=50%	35-37°C	18-24 Hours
Klebsiella aerogenes	13048	50-100	Inhibited	0%	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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 they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
3. Schweizerisches Lebensmittelbuch, 5th Ed., Chapter 56A.

GMP Good Manufacturing Practices Certified
Best Before
QTY. Quantity
REF Cataloge Number
Manufacturer
Temprature Unit
LOT/ B. NO. 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.

*ForLabUseOnly