CM 20653 – ENDO AGAR BASE (VEG.)

INTENDED USE

For standard test of lactose fermenting coliforms.

PRODUCT SUMMARY AND EXPLANATION

Thismedium is prepared byreplacing Pepticdigest of animal tissue with Veg peptone that is free of BSE/TSE risk. Endo Agar(Veg) media are the modifications of Endo Agar media which was developed by Endo for differentiation of lactose fermenters and lactose non-fermenters. Endo Agar(Veg) media like Endo Agar media are used for microbiological examination of potable water and waste water, dairy products and food.
The selectiviy of Endo Agar is due to Sodium sulfite / Basic fuchsin combination, which results in the suppression of gram positive organisms. Coliforms ferment the lactose, produce pink to rose red colonies and similar colouration of the medium. The colonies of organisms that do not ferment the lactose are colourless to faint against the pink background of the medium.

COMPOSITION

Ingredients	Gms / Ltr
Veg Peptone	10.000
Lactose	10.000
Dipotassium hydrogen phosphate	3.500
Sodium sulphite	2.500
Agar	12.000

PRINCIPLE

Themedium consists of Veg peptone which provide nitrogen, carbon, vitamins and minerals required for bacterial growth. Sodium sulphite and basic fuchsin (FD) has inhibitory effect on gram-positive microorganisms. Lactose fermenting coliforms produce aldehyde and acid. The aldehyde in turn liberates fuchsin from the fuchsin-sulphite complex, giving rise to a red colouration of colonies. With Escherichia coli, this reaction is very pronounced as the fuchsin crystallizes, exhibiting a permanent greenish metallic lustre (fuchsin lustre) to the colonies.

INSTRUCTION FOR USE

Dissolve 38.0gramsin 1000 ml purified / distilled water. Add 4 ml of 10% Basic Fuchsin.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
Mix well before pouring into sterile Petri plates.
Caution: Basic fuchsin is a potential carcinogen and care should be taken to avoid inhalation of the powdered dye and contaminationof the skin .

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light purple coloured, homogeneous, free flowing powder that may contain a large amount of minute to small dark particles.
Appearance of prepared medium	: Orangish pink coloured, clear to slightly opalescent gel with fine precipitate forms in petri plates.
pH (at 25°C)	: 7.5 ± 0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Luxuriant	>70%	Pink, mucoid	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	>70%	Pink to rose red with metallic sheen	35-37°C	18-24 Hours
S. serotype Typhi	6539	50-100	Luxuriant	>70%	Colourless to pale pink	35-37°C	18-24 Hours
Shigella sonnei	25931	50-100	Luxuriant	>70%	Colourless to pale pink	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	>70%	Pink, mucoid	35-37°C	18-24 Hours
Proteus vulgaris	13315	50-100	Luxuriant	>70%	Colourless to pale pink	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>70%	Colourless, irregular	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	None-poor	<20%	Pink, small	35-37°C	18-24 Hours
Staphylococcus aureus	25923	$>10^3$	Inhibited	0%	-	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof100 gm and 500 gm bottles.

STORAGE

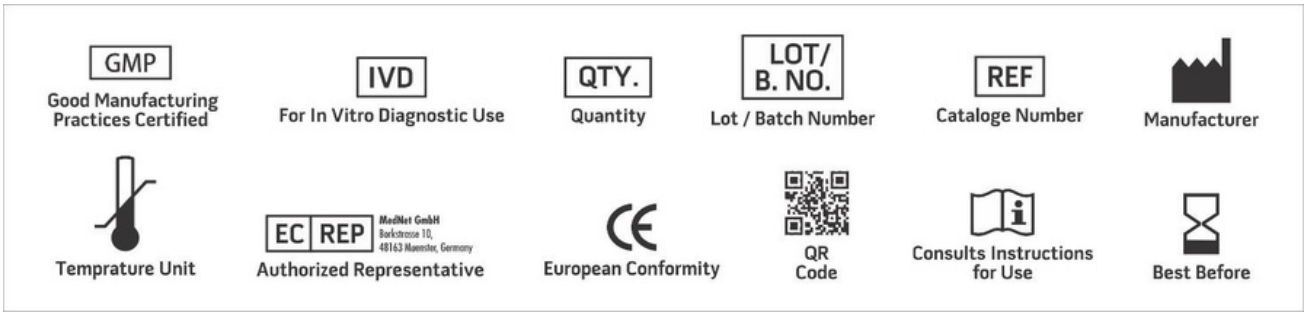
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. Endo, 1904, Zentralbl. Bakteriol., Abt. I. Orig., 35:109.
2. Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st ed, APHA, Washington DC
3. Standard Methods for the Examination of Dairy Products. 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H.Frank.
4. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.



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

*For LabUse Only