

CM 20253 – BILE ESCULIN AGAR, MODIFIED

INTENDED USE

For isolation and presumptive identification of group D Streptococci/Enterococci from food and pharmaceutical products.

PRODUCT SUMMARY AND EXPLANATION

This medium is a modification of Bile esculin agar, that differs in content of bile. The value of bile tolerance together with hydrolysis of esculin as a means of presumptive identification of group D streptococci/ enterococci is widely recognized. Bile esculin agar was formulated by Swan for the isolation and identification of Group D Streptococci from food. This medium also shows differentiation of Enterobacteriaceae, Klebsiella and Enterobacter-Serratia division from other Enterobacteriaceae genera on the basis of esculin hydrolysis.

The medium contains 2% bile that inhibits gram-positive bacteria other than group D Streptococci and Enterococci. Enterococci and Group D Streptococci hydrolyze esculin to esculetin and dextrose, which reacts with ferric citrate producing brownish black precipitate. Originally Bile esculin test was used for identification of Enterococci. But it was found that this test is also shared by group D Streptococci and therefore it is recommended that other tests such as salt tolerance be performed while identifying Enterococci.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	5.000
Beef extract	3.000
Oxgall	20.000
Esculin	1.000
Ferric citrate	0.500
Agar	15.000

PRINCIPLE

Peptone and meat extract provides nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential nutrients.

INSTRUCTION FOR USE

- Dissolve 44.5 grams of in 1000 ml purified/ distilled water.
- Heat to boiling to dissolve the medium completely.
- Mix and dispense into tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Allow the tubed medium to solidify in slanted position

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder : Light yellow to brownish yellow coloured homogeneous free flowing powder.
- Appearance of prepared medium : Yellow coloured clear to slightly opalescent gel with/without a bluish tinge forms in Petri plates.
- pH (at 25°C) : 7.1±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Esculin hydrolysis	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Luxuriant	>=70%	Positive	35-37°C	18-24 Hours
Streptococcus pyogenes	12344	50-100	Luxuriant	>=70%	Negative	35-37°C	18-24 Hours
Klebsiella aerogenes	13048	50-100	Luxuriant	>=70%	Positive	35-37°C	18-24 Hours
Proteus mirabilis	25933	50-100	Luxuriant	>=70%	Negative	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.Edberg S.C., Pittman S., and Singer J.M., 1977, J. Clin. Microbiol., 6:111.
- 2.Facklam R., 1972, Appl. Microbiol., 23:1131.
- 3.Facklam R., 1973, Appl. Microbiol., 26:138.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Bachstrasse 10 48143 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

*For LabUse Only

