CM 20672 – ESCULIN FERMENTATION BROTH

INTENDED USE
Forcultivation and differentiation of bacteria based on their ability to hydrolyze esculin.

PRODUCT SUMMARY AND EXPLANATION
EsculinFermentationBrothisusedforcultivation and differentiation of bacteria which hydrolyze esculin.

COMPOSITION

Ingredients	Gms / Ltr
Beef Heart Infusion	500.00
Tryptose	10.000
Sodium chloride	5.00
Esculin	1.000
Agar	1.000

PRINCIPLE
Tryptose and infusion from beef heart provide amino acids or other nitrogenous substances that support bacterial growth. Sodium chloride maintains osmotic equilibrium. Esculin is a glycoside incorporated as a differential agent to facilitate the identification of various organisms. Hydrolysis of esculin yields esculetin and dextrose.

INSTRUCTIONFOR USE

Dissolve 34.50 grams in 1000 ml distilled water.
Heat if necessary to dissolve the medium completely.
Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Note: Esculin hydolysis is observed on addition of Ferric citrate 0.1 gm/litre

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder
Appearance of prepared medium : Amber coloured clear to slightly opalescent with purplish tinge.
pH (at 25°C) : 7.0±0.2

INTERPRETATION
Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Esculin Fermentation	Incubation Temperature	Incubation Period
Yersinia enterocolitica	27729	50-100	luxuriant	Positive reaction, blackening of medium	35- 37°C	18- 24 Hours

Enterococcus faecalis	25912	50-100	luxuriant	Negative reaction, purple color	35- 37°C	18- 24 Hours
Escherichia coli	25922	50-100	Good	Positive reaction, blackening of medium	35- 37°C	18- 24 Hours
Enterococcus faecium	19434	50-100	luxuriant	Positive reaction, blackening of medium	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.Shigei1992,InIsenberg (ed.); Clinical microbiology procedures handbook, Vol-1, American Society for Microbiology, Washington, D.C.

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

*For LabUse Only