CM 20671 – ESCULIN AZIDE BROTH (VEG.)

INTENDED USE

For selective cultivation and identification of Streptococci.

PRODUCT SUMMARY AND EXPLANATION

Thismediumis preparedby using Vegpeptone and synthetic detergent, which make the medium free of BSE/ TSE risks. Rochaix noted the importance of esculin hydrolysis in the identification of Enterococci. Isenberg et al modified this medium by adding Sodium azide. Esculin Azide Broth (Veg) is the modification of the medium prepared by Isenberg. The broth is selectivedue to presence of synthetic detergent and sodium azide and provides rapid growth of Streptococci.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone	25.000
Yeast extract	5.000
Synthetic detergent	5.000
Sodium citrate	1.000
Esculin	1.000
Ferric ammonium citrate	0.500
Sodium azide	0.250

PRINCIPLE

Themediumconsists of Veg peptone and Yeast extract which provide nitrogenous nutrients to the organisms. Synthetic detergent inhibits other gram-positive bacteria while sodium azide inhibits gram-negative bacteria. Streptococci hydrolyze esculin to esculetin and dextrose. Esculetin and Ferric ammonium citrate forms dark brown to black complex, imparting dark brown colour to the broth.

INSTRUCTION FOR USE

Dissolve 37.80grams in 1000 ml purified / 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.
Warning: Sodium Azide has a tendency to form explosive metal azides with plumbing materials. It is advisable to use enough water to flush off the disposables.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Appearance of prepared medium : Amber coloured, clear solution having purplish tinge.
pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Esculin hydrolysis	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Good-luxuriant	Positive reaction, blackening of medium	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Inhibited	-	35-37°C	18-24 Hours
Streptococcus bovis	27960	50-100	Good-luxuriant	Positive reaction, blackening of medium	35-37°C	18-24 Hours
Streptococcus pyogenes	19615	50-100	Poor- good	Negative reaction, no change	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.Rochaix 1924, C.R. Soc. Biol 90:771.
2. Isenberg, 1970, Clin. Lab. Forum.

GMP Good Manufacturing Practices Certified	Best Before	QTY. Quantity	REF Catalogue 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.

*For LabUse Only