

## TM 749 - KANAMYCIN ESCULIN AZIDE BROTH BASE

### INTENDED USE

For selective isolation and identification of group D Streptococci in foodstuffs.

### PRODUCT SUMMARY AND EXPLANATION

Kanamycin Esculin Azide Broth Base is recommended for isolation and identification of group D Streptococci in food stuffs. Enterococci may be considered an essential part of the autochthonous microflora of humans and animals. Faecal streptococci bearing the group D Lancefield antigens are grouped as Enterococci. Lancefield Group D- Streptococci constituting the faecal Streptococci are contaminants of various food commodities, especially those of animal origin.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptone	20.000
Yeast extract	5.000
Sodium chloride	5.000
Sodium citrate	1.000
Esculin	1.000
Ferric ammonium citrate	0.500
Sodium azide	0.150

### PRINCIPLE

Tryptone and yeast extract provide essential growth nutrients for enterococci. Sodium azide inhibits gram negative organisms. Kanamycin has inhibitory effect on other gram-positive bacteria. Streptococci hydrolyse esculin to esculetin and dextrose. Esculetin and ferric ammonium citrate forms dark brown to black complex imparting black colour to the broth.

### INSTRUCTION FOR USE

- Dissolve 16.32 grams in 500 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add rehydrated contents of one vial of Kanamycin Sulphate Selective Supplement.
- Mix well and dispense into sterile tubes or flasks or as desired.

### QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Light yellow coloured homogeneous free flowing powder.  
**Appearance of prepared medium** : Medium amber coloured clear solution without any precipitate.  
**pH (at 25°C)** : 7.0±0.2

### INTERPRETATION

Cultural characteristics observed after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Esculin Hydrolysis	Incubation Temperature	Incubation Period
<i>Enterococcus bovis</i>	27960	50-100	Luxuriant	Positive reaction, blackening of medium	35-38°C	18-24 Hours
<i>Enterococcus faecium</i>	19434	50-100	Luxuriant	Positive reaction, blackening of medium	35-38°C	18-24 Hours
<i>Escherichia coli</i>	25922	$\geq 10^3$	Inhibited	-	35-38°C	18-24 Hours

**PACKAGING:**

In pack size of 100 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**

After use, 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. Mossel, D.A.A., Harrewijin, G.A and Elzebroek, Berdien, J.M (1973) UNICEF, Geneva.
4. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

 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 Birkstrasse 10, 49163 Moenster, 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 Lab Use Only

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