

TM 1082 - SALT BROTH, MODIFIED

INTENDED USE

For cultivation and differentiation of the enterococcal group D Streptococci from nonenterococcal group D Streptococci based on salt tolerance.

PRODUCT SUMMARY AND EXPLANATION

Salt Broth, Modified is used for differentiating enterococcal group D streptococci from non-enterococcal group D streptococci. Medium containing 6.5% sodium chloride is used to differentiate Enterococci by determining salt tolerance of bile esculin positive and catalase negative cocci. High salt content of this medium acts as a differential and selective agent by interfering with membrane permeability and osmotic equilibrium. Enterococcal group D Streptococcus species (*Enterococcus faecalis, Enterococcus faecium, Enterococcus durans* and *Enterococcus avium*) can be easily differentiated from the non-enterococcal species like *Streptococcus bovis, Streptococcus equines,* by the 6.5% sodium chloride tolerance test. Serological group D streptococci or bile esculin positive isolate may be easily identified as an *Enterococcus* species.

COMPOSITION

Ingredients	Gms / Ltr	
Peptic digest of animal tissue	10.000	
Heart infusion	10.000	
Glucose	1.000	
Sodium chloride	65.000	
Bromocresol purple	0.016	

PRINCIPLE

Heart infusion and peptic digest of animal tissue provide essential nitrogenous nutrients while glucose is the carbohydrate source in the medium. Bromocresol purple is the pH indicator which turns yellow from purple at acidic pH. Sodium chloride serves as differential and selective agent. Growth is indicated by turbidity and sometimes changes in colour of the indicator. A change in colour from purple to yellow also may occur due to utilization of glucose and thereby acid production.

INSTRUCTION FOR USE

- Dissolve 86.01 grams in 1000 ml distilled water.
- Heat if necessary, to dissolve the medium completely.
- Dispense as desired. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to greenish yellow homogeneous free flowing powder.
Appearance of prepared medium	: Purple coloured clear to slightly opalescent solution.
pH (at 25°C)	: 7.2±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.





PRODUCT DATA SHEET

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Microorganism	ATCC	Inoculum (CFU)	Growth	Incubation Temperature	Incubation Period
Streptococcus bovis	27960	>=10 ³	Inhibited	35-37°C	24-48 Hours
Enterococcus faecalis	29212	50-100	Good	35-37°C	24-48 Hours

PACKAGING:

In pack size of 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.

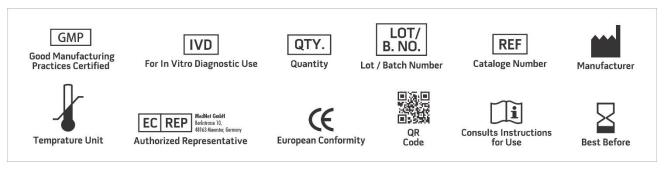
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- 1. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. 1, Williams Wilkins, Baltimore, Md.
- 2. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019

