TM 969 - HIPPURATE HYDROLYSIS BROTH

INTENDED USE
For detection of hippurate hydrolysing microorganisms.

PRODUCT SUMMARY AND EXPLANATION
Ayers and Rupp discovered that haemolytic Streptococci from human and bovine sources could be differentiated by their ability to hydrolyze sodium hippurate. Facklam et al modified the procedure for the presumptive identification of group A, B and D Streptococci. The ability of an organism to hydrolyze sodium hippurate is one of the tests that aid in the differentiation of bovine beta haemolytic group B Streptococci, from human ß-haemolytic group B Streptococci. Differentiation of ß-haemolytic group B Streptococci from ß-haemolytic group A Streptococci and non-enterococcal group D Streptococci is also aided by the determination of hippurate hydrolysis by enzymatic activity to form benzoic acid as the end product.

COMPOSITION

Ingredients	Gms / Ltr
Heart infusion powder	10.000
Peptone	10.000
Sodium chloride	5.000
Sodium hippurate	10.000

PRINCIPLE
Heart infusion powder and peptone provide essential nutrients required for bacterial metabolism. Sodium chloride maintains osmotic equilibrium. Sodium hippurate serves as the substrate for the measurement of hippurate hydrolysis. The amount of the precipitate is related to the degree of hippurate hydrolysis. Confirmed ß-haemolytic *Streptococcus* colonies are inoculated in this medium.

INSTRUCTION FOR USE
- Dissolve 35.0 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense 5 ml amounts in tubes.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow coloured, clear solution without any precipitate.
pH (at 25°C) : 7.4±0.2

INTERPRETATION
Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Hippurate Hydrolysis	Incubation Temperature	Incubation Period

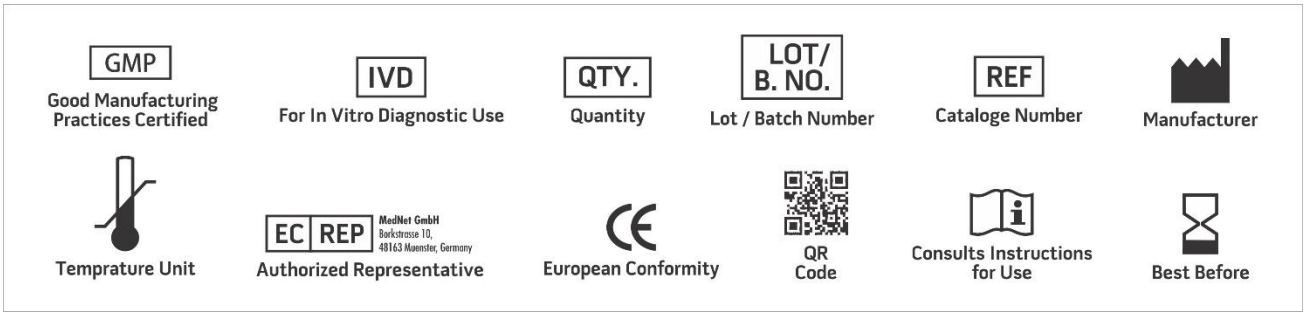
Enterococcus faecalis	29212	50-100	Luxuriant	Negative reaction, precipitate if any, dissolves on shaking	35 - 37°C	24-48 Hours
Streptococcus agalactiae	4768	50-100	Luxuriant	Positive reaction, brown flocculent precipitate persisting on shaking after 10 minutes	35 - 37°C	24-48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	Negative reaction, precipitate if any, dissolves on shaking	35 - 37°C	24-48 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. Ayers S. H. and Rupp P., 1922, J. Infect. Dis., 30:388.
2. Facklam R. R., Padula J. F., Thacker L. G., Wortham E. G., and Sconyers B. J., ,1974, Appl. Microbiol., 27:107.
3. Isenberg, (Ed.), 1992, Clinical Microbiology Procedures Handbook, Vol. I, American Society for Microbiology, Washington, D.C.
4. 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
5. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification -Maintenance of Medical Bacteria, Vol. 1, William and Wilkins, Baltimore.



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