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# TM 927 – ANAEROBIC BLOOD AGAR BASE

# **INTENDED USE**

For isolation and cultivation of Group A and B Streptococci from clinical samples.

# **PRODUCT SUMMARY AND EXPLANATION**

Group B *Streptococcus* (GBS) infection is a common bacterial infection that is rarely serious in adults, but can be life threatening to newborns. Group A Streptococci commonly causes strep throat and rarely, a potentially deadly destruction of flesh. Anaerobic Blood Agar Base with Neomycin Supplement is used for the isolation of Group A and Group B Streptococci from clinical specimens. This medium was originally formulated by Blanchette and Lawrence, by addition of the antibiotic Neomycin to sheep blood agar. This addition improved the detection of Group A & B Streptococci, while inhibiting the growth of the other accompanying haemolytic organisms.

## COMPOSITION

| Ingredients     | Gms / Ltr |  |  |
|-----------------|-----------|--|--|
| Tryptone        | 14.500    |  |  |
| Soya peptone    | 5.000     |  |  |
| Sodium chloride | 5.000     |  |  |
| Growth Factors  | 1.500     |  |  |
| Agar            | 14.000    |  |  |

#### PRINCIPLE

Tryptone and soya peptone in the medium provide carbon and nitrogenous compounds, long chain amino acids, vitamins and other essential growth nutrients. Growth factors and defibrinated sheep blood together supply enrichment for growth of fastidious organisms. Sodium chloride helps in maintaining the osmotic equilibrium. Addition of Neomycin supplement helps to suppress the normal flora thereby enhancing recovery of Group A and Group B Streptococci.

### **INSTRUCTION FOR USE**

- Dissolve 40 grams in 990 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure(121°C) for 15 minutes. Cool to 45-50°C.
- Aseptically add rehydrated contents of 1 vial of Neomycin Supplement, and 5% v/v sterile defibrinated sheep blood.
- Mix well and pour into sterile Petri plates.

# QUALITY CONTROL SPECIFICATIONS

| Appearance of Powder          | : Cream to yellow homogeneous free flowing powder.   |
|-------------------------------|--|
| Appearance of prepared medium | : Basal medium: Yellow coloured clear to slightly opalescent gel. After addition of 5%v/v sterile defibrinated blood : Cherry red coloured opaque gel forms in |
| pH (at 25°C)                  | Petri plates<br>: 7.3±0.2  |

#### **INTERPRETATION**

Cultural characteristics observed after incubation in presence of 5-10% CO2 with added 5%v/v sterile defibrinated sheep blood and Neomycin Supplement.



# **PRODUCT DATA SHEET**

2

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| Microorganism                            | ATCC  | Inoculum<br>(CFU/ml) | Growth             | Recovery | Haemolysis | Incubation<br>Temperature | Incubation<br>Period |
|--|-------|----------------------|--------------------|----------|------------|---------------------------|----------------------|
| Escherichia coli                         | 25922 | 50-100               | None-poor          | 0-10%    | None       | 35-37°C                   | 24-48 Hours          |
| Staphylococcus<br>aureus<br>subsp.aureus | 25923 | 50-100               | None-poor          | 0-10%    | None       | 35-37°C                   | 24-48 Hours          |
| Streptococcus<br>agalactiae              | 13813 | 50-100               | Good-<br>luxuriant | >=50%    | Beta       | 35-37°C                   | 24-48 Hours          |
| Streptococcus<br>pyogenes                | 19615 | 50-100               | Good-<br>luxuriant | >=50%    | Beta       | 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.

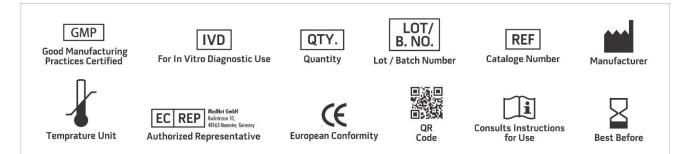
#### DISPOSAL

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

#### REFERENCES

1.Blanchette and Lawrence, 1967, Am. J. Clin. Pathol., 48-411.

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

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