

TM 2348 - STUART TRANSPORT MEDIUM W/O METHYLENE BLUE WITH CHARCOAL

INTENDED USE

For the preservation and transportation of *Neisseria* species and other fastidious organisms from the clinic to laboratory.

PRODUCT SUMMARY AND EXPLANATION

Stuart Transport media were originally designed by Stuart while studying *Gonococci*. Stuart et al later on modified the Stuart Medium for the transportation of gonococcal specimens for culturing. Ringertz included thioglycollate in the Stuart Medium and omitted charcoal. This medium may be used for the transportation of many fastidious organisms including the anaerobes by maintaining organism's viability without significant multiplication. Crooks and Stuart suggested the addition of Polymyxin B sulphate which facilitates the recovery of *Neisseria gonorrhoeae*.

The medium is chemically defined, semisolid, non-nutrient. It prevents microbial proliferation. Composition of the medium ensures that microorganisms present are able to survive for a sufficiently long period of time. The medium provides adequate degree of anaerobiosis. Prepared sterile medium undergoes a slight degree of oxidation at the upper periphery of the medium. Calcium chloride alongwith sodium glycerophosphate act as good buffering agent and also maintains osmotic equilibrium in the medium.

COMPOSITION

Ingredients	Gms / Ltr
Sodium thioglycollate	0.900
Sodium glycerophosphate	10.000
Calcium chloride	0.100
Charcoal	10.000
Agar	3.000

PRINCIPLE

Charcoal helps to neutralize materials, which are toxic to sensitive pathogens like *Neisseria gonorrhoeae*. Calcium and magnesium, potassium, sodium salts help the survival of gonococcal cells and also control permeability of bacterial cells.

INSTRUCTION FOR USE

- Dissolve 24 grams in 1000 ml double distilled water.
- Heat to boiling to dissolve the medium completely. Dispense into tubes with screw caps to give a depth of approximately 7 cm.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes and after sterilization, tighten the caps.
- Cool in an upright position. Turn the tubes several times while agar is solidifying, to maintain uniform suspension of charcoal particles.

Note: Care should be taken that the water is free from chlorine.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Black coloured homogeneous free flowing powder.
Appearance of prepared medium	: Black coloured slightly opalescent butt with upper 10% / less portion blue on standing.
pH (at 25°C)	: 7.4±0.2



INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Subculture Medium(Stuart Transport Medium)	Incubation Temperature	Incubation Period
<i>Haemophilus influenzae</i>	49247	50-100	Good	Chocolate agar (incubated In Co ₂ atmosphere)	35-37°C	72 Hours
<i>Neisseria gonorrhoeae</i>	19424	50-100	Good	Chocolate agar (incubated In Co ₂ atmosphere)	35-37°C	72 Hours
<i>Streptococcus pneumoniae</i>	6303	50-100	Good	Tryptone soya agar with 5% sheep blood	35-37°C	72 Hours

PACKAGING:

In pack size of 100 gm and 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. Stuart, 1946, Glasgow Med. J. 27:131.
2. Stuart, Toshach and Patsula, 1954, Can. J. Public Health, 45:73.
3. Ringertz, 1960, Acta Pathol. Microbiol. Scand., 48:105.
4. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
5. Crookes E.M.L. and Stuart R.D., 1959, J. Path. Bact., 78:283.

 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	 CE 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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