

## TM 2349 - STUART TRANSPORT MEDIUM W/O METHYLENE BLUE

### INTENDED USE

For the preservation and transportation of *Gonococcal* species and other fastidious organisms.

### 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*.

### COMPOSITION

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

### PRINCIPLE

This medium is chemically defined, semisolid, non-nutrient medium which prevent microbial proliferation. Because of its composition 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 will undergo a slight degree of oxidation at the upper periphery of the medium. Calcium chloride along with sodium glycerophosphate act as good buffering agent and also maintains osmotic equilibrium in the medium.

### INSTRUCTION FOR USE

- Dissolve 14 grams in 1000 ml double purified / 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 the tubes immediately in an upright position, care should be taken that the water is free from chlorine.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Powder</b>	: White to light blue coloured homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Colourless to whitish coloured slightly opalescent butt.
<b>pH (at 25°C)</b>	: 7.4±0.2

### INTERPRETATION

Cultural characteristics observed after an incubation when sub cultured from Stuart Transport Medium.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Subculture Medium	Incubation Temperature	Incubation Period

<i>Haemophilus influenzae</i>	49247	50-100	Good	Chocolate agar (incubated in co2 atmosphere)	35 - 37°C	72 Hours
<i>Neisseria gonorrhoeae</i>	19424	50-100	Good	Chocolate agar (incubated In co2 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.

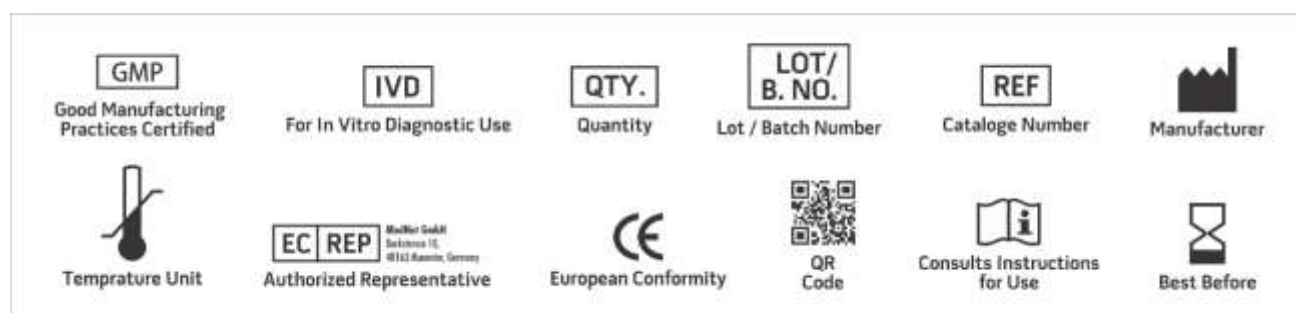
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

**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.



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

\*For Lab Use Only  
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