

## TM 420 – TRANSPORT MEDIUM, STUART (STUART TRANSPORT MEDIUM)

### INTENDED USE

For preservation and transportation of *Neisseria* 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. The medium may be used for the transportation of many fastidious organisms including anaerobes by maintaining the organism's viability without significant multiplication. Crooks and Stuart suggested the addition of Polymyxin B sulphate which facilitates the recovery of *Neisseria gonorrhoeae*.

This medium is a chemically defined, semisolid, non-nutrient medium which prevent microbial proliferation. Because of this composition the medium ensures that microorganisms present are able to survive for a sufficiently long period of time. The medium provides an adequate degree of anaerobiosis which can be monitored by means of the redox indicator methylene blue. Prepared sterile medium will undergo a slight degree of oxidation at the upper periphery of the medium, however, in the tube or vial exhibits a distinct blue colour throughout the medium, it should be discarded.

### COMPOSITION

Ingredients	Gms / Ltr
Sodium glycerophosphate	10.000
Sodium thioglycollate	1.000
Calcium chloride	0.100
Methylene blue	0.002
Agar	3.000

### PRINCIPLE

Calcium chloride along with sodium glycerophosphate act as good buffering agent and also maintains osmotic equilibrium in the medium. Agar acts as a solidifying medium.

### INSTRUCTION FOR USE

- Dissolve 14.1 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 with upper 10% or less portion blue on standing.
<b>pH (at 25°C)</b>	: 7.4±0.2

### INTERPRETATION

Cultural characteristics observed after incubation when subcultured 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. Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
2. Ringertz, 1960, Acta Pathol. Microbiol. Scand., 48:105.
3. Stuart, 1946, Glasgow Med. J. 27:131.
4. Stuart, Toshach and Patsula, 1954, Can. J. Public Health, 45:73.
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 <small>MedNet GmbH Borkstrasse 10, 48163 Moenster, Germany</small>	 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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