



## Stuart Transport Medium w/o Sodium Glycerophosphate

M1203

Stuart Transport medium with addition of sodium glycerophosphate, is used for routine transport of *Gonococcus* species and other fastidious organisms.

### Composition\*\*

Ingredients	Gms / Litre
Calcium chloride	0.100
Sodium thioglycollate	1.000
Methylene blue	0.002
Agar	3.000
Final pH ( at 25°C)	7.4±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 4.1 grams in 1000 ml double distilled water. Add 10 grams of sodium glycerophosphate. 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 lbs 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.

### Principle And Interpretation

Stuart Transport media was originally designed by Stuart while studying Gonococci (1). This medium may be used for the transportation of many fastidious organisms including the anaerobes by maintaining organisms viability without significant multiplication.

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 provide 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, if the tube or vial exhibits a distinct blue colour throughout the medium, it should be discarded. Calcium chloride act as good buffering agent and also maintains osmotic equilibrium in the media.

### Quality Control

#### Appearance

White to light blue homogeneous free flowing powder

#### Gelling

Semisolid, comparable with 0.3% Agar gel.

#### Colour and Clarity of prepared medium

Colourless to whitish coloured slightly opalescent butt with upper 10% or less portion blue on standing.

#### Reaction

Reaction of 0.41% w/v aqueous solution at 25°C. pH : 7.4±0.2

#### pH

7.20-7.60

#### Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 72 hours when subcultured from Stuart Transport Medium.

#### Cultural Response

Organism	Growth	Subculture Medium
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#### Cultural Response

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<i>Haemophilus influenzae</i> ATCC 35056	good	Chocolate Agar (incubated in CO2 atmosphere)
<i>Neisseria gonorrhoeae</i> ATCC 19424	good	Chocolate Agar (incubated in CO2 atmosphere)
<i>Streptococcus pneumoniae</i> ATCC 6303	good	Tryptone Soya Agar with 5% sheep blood.

### Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

### Reference

1. Stuart 1946, Glasgow Med J-27:131.

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#### Disclaimer :

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