

# Stuart Transport Medium

Cat. 1518

For transport and maintenance of all kind of samples

## Practical information

Applications	Categories
Transport	General use

Industry: Clinical / Transport media for samples



## Principles and uses

Stuart Transport Medium is a semisolid medium used in the transport and preservation of biological specimens for the cultivation of diverse organisms such as gonococci, streptococci, Enterobacteriaceae, etc.

It is essentially non-nutritive and contains sodium thioglycollate to retard oxidation. Calcium chloride, along with sodium glycerophosphate, act as a good buffering agent and also maintains osmotic equilibrium in the medium. Methylene blue acts as the redox indicator, the blue color indicates the presence of oxygen.

The original formula was developed by Stuart for the preservation and transport of *Neisseria gonorrhoeae* and *Trichomonas vaginalis*. Later, Stuart et al. demonstrated that the medium could be used in the handling and cultivation of *Haemophilus influenzae*, alpha and beta hemolytic streptococci, pneumococci, and Enterobacteriaceae which can survive at an ambient temperature for 6 to 8 weeks. However, it is recommended to send the sample to the laboratory as soon as possible. For the transport of delicate microorganisms it is advisable to use cotton swabs impregnated with charcoal which are commercially available.

## Formula in g/L

Agar N° 2	3	Calcium chloride	0,1
Methylene blue	0,002	Sodium glycerophosphate	10
Sodium thioglycollate	1		

## Preparation

Suspend 14,1 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense in screw-capped tubes and sterilize in autoclave at 121 °C for 15 minutes.

## Instructions for use

»For clinical diagnosis, the type of sample is any sample of clinical origin.

- Collect the sample to be analyzed with a sterile swab.
- Insert the swab into the medium and close the tube with a cap.
- Take the sample to the laboratory as soon as possible. It can be stored for up to 24 hours at room temperature.

## Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Cream	Blue in surface	7,4±0,2

## Microbiological test

Incubation conditions: (4-25 °C / 72 h).

## Microrganisms

Recovery rate (%)

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Shigella flexneri ATCC 12022  
Neisseria meningitidis ATCC 13090  
Haemophilus influenzae ATCC 19418  
Neisseria gonorrhoeae ATCC 19424  
Streptococcus pneumoniae ATCC 6301  
Bordetella pertussis ATCC 9340

## Storage

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Temp. Min.:2 °C  
Temp. Max.:25 °C

## Bibliography

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Beakley, J. W. 1975. The toxicity of wooden applicator sticks for Neisseria gonorrhoeae. Pub. Hlth, Lab. 15 (1), 11:16.  
Stuart, R.D. Toshach, Sh. R., and Patsula, M. T.: 1954. The problem of transport of specimen for cultura of gonococci. Canad. J. Publ. Hlth. 45(2), 13:83.  
Stuart, R. D. 1954. Transport medium for specimens in Public Health Bacteriology. Pub. Hlth. Rep. Wash. 74(5), 431:438.