

# 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 semi-solid medium used for the transport and preservation of biological samples when immediate inoculation into a culture medium is not possible. It is a suitable medium for the cultivation of various organisms such as gonococci, streptococci, enterobacteria, etc.

It was described by Stuart in 1946, and later, it was used to preserve the viability of fastidious microorganisms such as *Neisseria* spp. or *Haemophilus influenzae*. All specimens should be transported to the laboratory as soon as possible and maintained at room temperature since chilling may be detrimental to some organisms.

Stuart Transport Medium is essentially non-nutritive; it contains sodium thioglycollate, which helps delay oxidation and allows a better recovery of anaerobics. Calcium chloride, together with sodium glycerophosphate, act as a buffering agent that maintains the osmotic balance of the medium. Methylene blue is the redox indicator; the blue color indicates the presence of oxygen. Despite the sodium thioglycollate, the medium can undergo a slight oxidation in the upper part of the tube, which acquires a blue coloration. If a distinctive blue color is observed, discard the tube.

## 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

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Incubation conditions: (25-30 °C / 24 h).

### Microorganisms

Streptococcus pyogenes ATCC 19615

Bacteroides fragilis ATCC 25285

Pseudomonas aeruginosa ATCC 27853

### Specification

Good growth on Blood Agar

Good growth on Blood Agar

Good growth on Blood Agar

## 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.