

Reference : 03-643 Scha Product : CARY-BLAIR TRANSPORT MEDIUM



# Specification

Semisolid non-nutritive medium used for transporting and preserving microbiological specimens.

#### Formula \* in g/L

Sodium chloride	. 5.00
Sodium thioglycollate	. 1.50
Disodium phosphate	. 1.10
Calcium chloride	0.09
Agar	5.60

Final pH 8,4 ±0,2 at 25 °C

\* Adjusted and /or supplemented as required to meet performance criteria

### Directions

Suspend 13,3 g of the powder in 1 L of distilled water and boil until is completely dissolved. Distribute into suitable containers and sterilize in autoclave at 121°C for 15 minutes. Store the prepared medium at room temperature. Do not refrigerate.

#### Description

Transport media are a chemically defined, semisolid, non-nutritive, buffered media that provide a reduced environment to maintain the viability of microorganisms without promoting growth.

Cary & Blair modified Stuart's Transport Medium for gonococci producing a formulation more adapted to the transport of faecal samples. The basic modification was the substitution of glycerophosphate for an inorganic phosphate that prevents bacterial overgrowth. Raising the pH to 8,4 and the suppressive effect of methylene blue favours the viability of *Shigella*, *Salmonella* and *Vibrio sps*.

#### Technique

Use sterile cotton tipped swabs on wooden sticks to collect the specimen, insert the swabs into the upper third of the medium in the transport container. Cut the protruding swab stick and tightly close the container. Label the container and send it to the laboratory with minimum delay. The culture and analysis of the sample must be performed within 24 hours of collection.

Precautions and Limitations of the Procedure:

Optimal growth and typical morphology can only be expected following direct inoculation and appropriate cultivation.

- Prior to use, the medium should not be incubated to check the sterility.

- The sterility of the medium can be verified using sterile control samples (uninoculated swabs). This medium must not be employed subsequently.

- The medium can maintain the viability of several microorganisms for transport purposes only. It should not be used as a storage or enrichment medium.

- The results obtained from this medium are dependent on the quality of the specimen and on the time elapsed from collection until analysis in the laboratory. The viability of the cells will diminish over time and some overgrowth of accompanying microbiota can occur during prolonged periods of transit.

- Survival of bacteria in a transport medium depends up on the formulation and on many other factors including media type, the number of organisms in the specimen, the temperature and duration of transport. Inoculation of appropriate culture media should be carried out within 24 hours.

## Quality control

#### Incubation temperature: 20-25 °C

Incubation time: 24 h

**Inoculum:** Swab impregnated in bacterial suspension. Keep the inoculum at 4±1°C // 22±1°C during 24- 48 h. Recover

Microorganism	Growth	Remarks
Salmonella typhimurium ATCC <sup>®</sup> 14028	Good	Recovery in TSA / 24h - 35°C
Shigella sonnei ATCC <sup>®</sup> 9290	Good	Recovery in TSA / 24h - 35°C
Klebsiella pneumoniae ATCC <sup>®</sup> 10031	Good	Recovery in TSA / 24h - 35°C
Streptococcus pneumoniae ATCC <sup>®</sup> 49619	Good	Recovery in TSA / 24h - 35°C



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## References

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# Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).