

TM 456 - TRANSPORT MEDIUM, AMIES W/O CHARCOAL

INTENDED USE

For transportation and preservation of clinical samples.

PRODUCT SUMMARY AND EXPLANATION

Transport Medium is necessarily and should be a non-nutrient, semisolid, reductive medium which hampers the self-destructive enzymatic reactions within the cells and also inhibits toxic oxidation effects. Transport Medium was primarily developed by Moffett et al and Stuart et al for carrying gonococcal specimens. However, Cary and Blair observed the problem of overgrowth of contaminating organisms while carrying faecal specimens containing Shigellae. It was seen that the contaminants derive their energy from the glycerophosphate and therefore a buffer having inorganic salts was a better replacement for glycerophosphate.

For the collection of the specimen, use sterile cotton tipped swabs on wooden sticks. Push the swabs down to one third of the medium depth and cut the stick, so that when the cap is screwed down, the swab is forced to the bottom of the medium. Tighten the cap firmly on the bottle. The specimen will be preserved during transportation and also the viability of the organisms will be maintained but it will diminish over the time. Some growth of contaminants also may occur during longer period of transport. After the transportation, the specimen should be inoculated in proper medium as soon as possible. The cultures on transport swabs must not be kept at room temperature for more than 24 hours.

COMPOSITION

Ingredients	Gms / Ltr	
Sodium chloride	3.000	
Potassium chloride	0.200	
Calcium chloride	0.100	
Magnesium chloride	0.100	
Potassium dihydrogen phosphate	0.200	
Disodium hydrogen phosphate	1.150	
Sodium thioglycollate	1.000	
Agar	4.000	

PRINCIPLE

Amies modified Stuart's Transport Medium by replacing glycerophosphate with an inorganic phosphate buffer, provides a reduced environment due to the presence of sodium thioglycollate and small amount of agar. Amies Medium is devoid of methylene blue. Calcium, magnesium, potassium and sodium salts help the survival of gonococcal cells by restricting their permeability Phosphates buffer the medium.

INSTRUCTION FOR USE

- Dissolve 9.75 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense in screw cap bottles or tubes in 6 ml or desired quantity.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool in an upright position.

QUALITY CONTROL SPECIFICATIONS















Appearance of Powder : Off-white to yellow homogeneous free flowing powder.

Appearance of prepared medium : Colourless clear to slightly opalescent gel forms in tubes as butts.

pH (at 25°C) : 7.3±0.2

INTERPRETATION

Cultural characteristics observed after incubation when subcultured on Tryptone Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth on Tryptone Soya Agar	Incubation Temperature	Incubation Period
Neisseria meningitidis	13090	50-100	Luxuriant	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	35-37°C	18-24 Hours
Staphylococcus epidermidis	12228	50-100	Luxuriant	35-37°C	18-24 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	35-37°C	18-24 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. Amies C. R., 1967, Can. J. Public Health, 58:296
- 2. Cary and Blair, 1964, J. Bacteriol., 88:96.
- 3. Moffett, Young and Stuart, 1948, Brit. Med. J., 2:241.
- 4. Stuart R. D., 1946, J. Path. Bact., 58:343.





































NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019







