Amies Transport Medium (i23289)

Used for collecting, transporting and preserving microbiological specimens.

Industry: Clinical / Transport Media

Principles & Uses

Amies Transport Medium with Charcoal is designed for the collection, transportation, and preservation of microbiological specimens, specifically catering to the viability of microorganisms without substantial growth. Modified from Stuart's Transport Medium, Amies introduced an inorganic phosphate buffer and charcoal, crucial for enhancing the survival of sensitive pathogens like *Neisseria gonorrhoeae*. The medium offers a reduced environment via sodium thioglycollate and a small agar content. Charcoal plays a pivotal role in neutralizing materials toxic to pathogens, and chloride salts contribute to electrolyte balance. Phosphates serve as a buffer system, and sodium thioglycollate suppresses oxidative changes, fostering a reduced environment.

When collecting specimens, sterile cotton-tipped swabs or sticks are used, ensuring the swab reaches the medium's bottom. The transport maintains specimen viability, with charcoal mitigating toxic substances. While transportation preserves organisms, viability diminishes over time, and contaminants may grow during longer transport. Post-transportation, immediate inoculation onto culture media is crucial for optimal results. Amies Transport Medium is especially recommended for throat, vaginal, and wound samples, offering an effective solution for preserving microbial specimens during transit.

Composition (gr/L)

Sodium Chloride 3 g, Potassium Chloride 0.2 g, Calcium Chloride 0.1 g, Magnesium Chloride 0.1 g, Monopotassium Phosphate 0.2, Disodium Phosphate 1.15 g, Sodium Thioglycollate 1 g, Charcoal 10 g, Agar 4 g.

Final pH at 25°C 7.3 ± 0.2

Preparation from dehydrated Powder

Suspend 20 g of the powder in 1 L of purified water. Mix thoroughly. Dispense into 6-8 mL screw-cap vials to within 5 mm of the top. Cap tightly. Autoclave at 121°C for 15 minutes. Retighten caps, if necessary. Invert vials just prior to solidification to uniformly distribute the charcoal.

Quality Control

Dehydrated Appearance: Grey to black, free-flowing, homogeneous.

Prepared Appearance: Black colored opaque gel.

Reaction of 2.0% Solution at 25°C: pH 7.3 ± 0.2

Cultural Response

The medium was inoculated with the organisms listed below. Cultural characteristics were observed after incubation at 35 - 37°C for 18-24 hours.

Organism (ATCC*)	Growth
Escherichia coli (25922)	Good
Staphylococcus aureus (25923)	Good
Pseudomonas aeruginosa (27853)	Good

*ATCC is a registered trade mark of the American Type Culture Collection.

Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.