

Amies Transport Medium with Charcoal**Use and description:**

For transport and maintenance of microbiological samples

ATM WITH CHARCOAL is used for collecting, transporting and preserving microbiological specimens. It is formulated to maintain the viability of microorganisms without significant increase in growth, being non-nutritive, phosphate buffered and semi-solid. Amies developed his formula (1967) with charcoal up on proving that *Neisseria gonorrhoeae* increased its survival rate when charcoal swabs were used. Amies solved the problem of charcoal removal from the swabs by incorporating charcoal into the formulation. Amies Transport Medium is recommended for throat, vaginal, and wound samples. In the formulation, Charcoal neutralizes fatty acids that are toxic to microorganisms. The Chloride salts supply essential electrolytes for transport and osmotic balance. Phosphates act as a buffer system. Sodium thioglycollate suppresses oxidative changes and provides a reduced environment.

Composition per liter g/l :

Activated Charcoal	10.00
Monopotassium Phosphate	0.20
Sodium Chloride	3.00
Calcium Chloride	0.10
Disodium Phosphate	1.10
Magnesium Chloride	0.10
Sodium Thioglycollate	1.00
Agar	7.50
Potassium Chloride	0.20

Final pH of the ready to use medium: 7.3±0.2 at 25.0 °C

Medium preparation:

Add 28,1 grams of dehydrated culture medium to 500ml liter of distilled water.
boil for 1 minute – Do not overheat – Do not autoclave it !

Quality specifications:

1. The powder is homogeneous, free flowing and black
2. Ready to use medium: black

Microbiological response after -72 hours at 4C to 25°C:

Organism	Recovery at 4C	Recovery at 25C
<i>Neisseria gonorrhoeae</i> ATCC 19424	≥50%	≥50%
<i>Brucella abortus</i> ATCC 4315	≥50%	≥50%
<i>Shigella flexneri</i> ATCC 12022	≥50%	≥50%
<i>Salmonella typhi</i> ATCC 6539	≥50%	≥50%

Storage:

Store the sealed bottle containing the dehydrated medium at 25 to 30.0 °C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original light beige color.