



AMIES TRANSPORT MEDIUM W/ CHARCOAL

TM 009

INTENDED USE

For transportation and preservation of bacteriological samples.

COMPOSITION

Ingredients	Gms/Ltr
Activated charcoal	10.000
Agar	4.000
Sodium chloride	3.000
Disodium phosphate	1.150
Sodium thioglycollate	1.000
Monopotassium phosphate	0.200
Potassium chloride	0.200
Calcium chloride	0.100
Magnesium chloride	0.100

PRODUCT SUMMARY AND EXPLANATION

AMIES TRANSPORT MEDIUM 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 nonnutritive, phosphate buffered and semi-solid. Amies introduced his modification of Stuart's Transport Medium to overcome a number of problems. In Stuart's Transport Medium suffered from overgrowth by coliforms that were capable of utilizing sodium glycerophosphate. Scientist "Amies" has replaced this problem of component with an inorganic phosphate buffer system. In the formulation of Amies, Transport medium with Charcoal neutralizes the fatty acids that are toxic to microorganisms. The addition of charcoal to the medium extended the survival time of *Neisseria gonorrhoeae* from 24 to 72 hours.

PRINCIPLE

Potassium chloride, Magnesium chloride and Calcium chloride salts are added to control the permeability of the bacterial cell wall and thus prolong their survival. Disodium phosphates and Monopotassium phosphate act as a buffer system. Agar is a solidifying agent. The agar concentration was increased from that proposed by Stuart because the presence of charcoal particles interferes with the gelling properties of the agar. Sodium thioglycollate suppresses oxidative changes and provides a reduced environment.



INSTRUCTIONS FOR USE

1. Dissolve 19.75gms in 1000ml of distilled water.
2. Gently heat to boiling with gentle swirling and dissolve the medium completely.
3. Dispense the media in tubes.
4. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
5. Place the tubes to cool in upright position. Mix well intermittently to maintain the homogenous or uniform mixture of the charcoal suspension in the medium.

QUALITY CONTROL SPECIFICATIONS

Appearance Dehydrated powder: Grey to black homogeneous free flowing powder

Appearance of the prepared medium: Black colour opaque gel forms in tubes as butts

pH (at 25°C): 7.2 ± 0.2

CULTURE RESPONSE

Cultural characteristics observed when subcultured on Soyabean Casein Digest Agar (TM 345) after incubation at 35 ± 2 °C for 18-24 hours.

Organism	ATCC	Inoculum (CFU/ml)	Growth
<i>Escherichia coli</i>	25922	50-100	Luxuriant
<i>Klebsiella pneumoniae</i>	13883	50-100	Luxuriant
<i>Neisseria meningitidis</i>	13090	50-100	Luxuriant
<i>Pseudomonas aeruginosa</i>	27853	50-100	Luxuriant
<i>Salmonella Typhi</i>	6539	50-100	Luxuriant
<i>Shigella flexneri</i>	12022	50-100	Luxuriant
<i>Staphylococcus aureus</i>	25923	50-100	Luxuriant
<i>Vibrio cholerae</i>	15748	50-100	Luxuriant

STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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

Manufacturer Address: Titan Biotech Limited, A- 902A, RIICO Industrial Area, Phase III, Bhiwadi-301019.

Authorized Representative: MedNet GmbH, Borkstrasse 10, 48163 Munster, Germany.



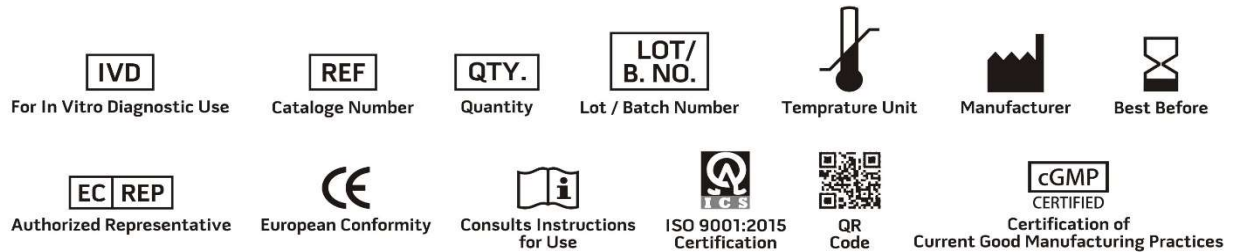
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PRODUCT DATA SHEET

provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

REFERENCES

1. Amies C.R., 1967, Can. J. Public Health, 58:296
2. Stuart R.D., 1946, J. Path. Bact., 58:343.
3. Stuart R.D., 1959, Pub. Hlth. Rep., 74:431.
4. Stuart R.D., Toshach S.R. and Patsula T.M., 1954, Can. J. Pub. Hlth., 45:75.
5. MacFaddin J.F., 1985, Media For Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
6. Isenberg, H.D. Clinical Microbiology Procedures Handb0ook. 2nd Edition.
7. Jorgensen, J.H., Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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