

TECHNICAL SHEET

B1299	DIAGNOSTIC SENSITIVITY TEST AGAR (D.S.T. AGAR)					
Formula						
Ingredients :		gms/lit.				
Proteose peptone		10.00				
Veal infusion solids		10.00				
Dextrose		2.00				
Sodium chloride		3.00				
Disodium phosphate		2.00				
Sodium acetate		1.00				
Adenine sulphate		0.01				
Guanine hydrochloride		0.01				
Uracil		0.01				
Xanthine		0.01				
Aneurine		0.00002				
Agar		15.00				
Final pH (at 25°C) : 7.4 ± 0.2						
Directions :						
Suspend 43.04 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. For blood agar, cool the base to 50°C and add 7% v/v sterile defibrinated horse blood aseptically. Mix well with gentle rotation and pour into sterile Petri plates.						
Principle :						
The medium is nutritionally rich due to presence of amino acid bases and glucose. The salts present, helps in avoiding sudden pH shifts due to acid production, which might affect the susceptibility test and haemolytic reactions and the MIC values of pH susceptible antimicrobials. Aneurine acts as vitamin source which improves the growth of several organisms especially Staphylococci. The agar used in the formulation has been specially processed to allow unimpeded diffusion of antimicrobials from discs. Addition of the bases like adenine, guanine, uracil and xanthine improve the antibiotic testing performance of the medium.						
QC Tests - (I) Dehydrated Medium						
Colour :	Cream to yellow					
Appearance :	Homogeneous Free Flowing powder					
(II) Rehydrated medium						
PH (post autoclaving/heating) :	7.4 ± 0.2					
Colour (post autoclaving/heating) :	A) Basal medium : Cream to medium amber B) (After addition of blood) : Cherry red					
Clarity (post autoclaving/heating) :	A) Clear to slightly opalescent B) Opaque					
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 18-24 hrs.at 35-37°C.						
MICROORGANISM (ATCC)	GROWTH (WITHOUT ANTIBIOTICS)					
Escherichia coli (25922)	Luxuriant					
Micrococcus luteus (10240)	Luxuriant					
Neisseria meningitides (13090)	Luxuriant (with the addition of blood)					
Proteus mirabilis (25933)	Luxuriant					
Salmonella typhi (6539)	Luxuriant					
Shigella flexneri (12022)	Luxuriant					
Staphylococcus aureus (25923)	Luxuriant					
Streptococcus faecalis (29212)	Luxuriant					
Streptococcus pyogenes (19615)	Luxuriant (with the addition of blood)					
Streptococcus pneumoniae (6303)	Luxuriant					
Precautions :						
1. For Laboratory Use.						
2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.						
Limitations :						
1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.						
Use :						
It is used as an antibiotic sensitivity-testing medium for antibiotic sensitivity testing of fastidious pathogens such as Neisseria, Streptococcus and Haemophilus species with blood enrichment.						
Storage :						
Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.						
Packing :						
500 gm bottle						
Product profile:		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1299		43.04g/l	11.617L	7.4 ± 0.2	7% v/v sterile defibrinated horse blood	121°C / 15 minutes

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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