

BIOMARK Laboratories-INDIA

www.biomarklabs.com

TECHNICAL SHEET

B911	ACETAMIDE BROTH (TWIN PACK)			
Formula				
Ingredients:		gms/lit.		
Part A: Acetamide		10.00		
Part B: Sodium chloride		5.00		
Dipotassium hydrogen phosphate		1.39		
Potassium dihydrogen phosphate		0.73		
Magnesium sulphate		0.50		
Phenol red		0.012		
Final pH (at 25°C):		7.0 ± 0.2		
Directions:				
Suspend 7.63 grams of part B in 1000 ml distilled water. Add 10.0 grams of Part A. Heat if necessary, to dissolve the medium completely. Dispense in 10ml amounts in tubes or as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.				
Principle:				
The media contains inorganic salts and acetamide a sole carbon and nitrogen source. However very few organisms growing in the medium metabolize acetamide by the process of deamination (acrylamidase activity). This unique ability is useful in identification of various non-fermenting gram-negative organisms. This ability is shown by Pseudomonas aeruginosa, Pseudomonas aciovorans Group III (Achromobacter xylosoxidans) and Alcaligenes odorans. Acetamide deamination leads to the liberation of ammonia, which thereby increases the pH of the medium, leading to a subsequent colour change of the phenol red indicator from yellow orange to purplish red. Some strains require upto seven days to exhibit a positive reaction as they deaminate acrylamide slowly. Phosphates in the media serve as buffering agents, Magnesium sulphate is a source of ions that stimulate metabolism whereas Acetamide serves as the sole nitrogen and carbon source. Sodium chloride maintains osmotic equilibrium. Phenol red is the pH indicator.				
QC Tests - (I) Dehydrated Medium				
Colour :		Part A : Colourless Part B : Light yellow to light pink		
Appearance:		Part A: Deliquescent crystals Part B: Homogeneous Free Flowing powder		
(II) Rehydrated medium				
pH (post autoclaving/heating) :		7.0 ± 0.2		
Colour (post autoclaving/heating):		Orange		
Clarity (post autoclaving/heating) :		Clear solution in tubes		
(III) Q.C. Test Microbiological				
Cultural characteristics observed after an incubation at 35-37°C for 4-7 days.				
MICROORGANISM (ATCC)		GROWTH		DEAMINATION
Pseudomonas aeruginosa (27853)		Good –luxuriant		positive reaction, purplish red colour (within 7days)
Stenotrophomonas maltophilia (13637)		Good –luxuriant		negative reaction, no purplish red colour (after 7 days)
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 :		For detection of Pseudomonas aeruginosa in water samples.		
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
B911	7.63 g/l part A 10.00 g/l part B	28.36 L	7.0±0.2	None 121°C/15 min.