

B280	PM INDICATOR AGAR (PENICILLIN IN MILK INDICATOR AGAR)				
Formula					
Ingredients :		gms/lit.			
Peptic digest of animal tissue		5.00			
Casein enzymic hydrolysate		1.70			
Papaic digest of soyabean meal		0.30			
Meat Extract B#		3.00			
Dextrose		5.25			
Sodium chloride		0.50			
Dipotassium phosphate		0.25			
Polysorbate 80		1.00			
Bromo cresol purple		0.06			
Agar		15.00			
# Equivalent to Beef Extract					
Final pH (at 25°C) : 7.8 ± 0.2					
Directions :					
Suspend 3.2 gms. in 100ml distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C.					
Principle :					
PM Indicator Agar is used for rapid detection of trace amounts of penicillin in milk where AOAC has recommended Bacillus stearothermophilus qualitative discs (1).PM Indicator Agar is designed according to the formula published by the 18 th Annual Meeting of the National Mastitis Council (2). This method is a modification of the method approved by the international Dairy Federation for the qualitative detection of penicillin in milk (3). Originally a medium called Reductase Medium was suggested by Reid and Brewer for detecting penicillin in milk by using Bacillus subtilis (4). The present medium is better , faster and more reliable than that of Reid and Brewer (This medium is designed to support and demonstrate the growth and acid formation by B.stearothermophilus, which is sensitive to penicillin and β-lactam residues).To demonstrate the presence of traces of penicillin in milk, the qualitative disc method is found to be more suitable which is also recommended by AOAC.Inoculate the medium with 1 ml of uniformly dispersed B. stearothermophilus suspension prepared as per AOAC(1). Prepare dilutions of standard penicillin G (positive control) to give concentrations in the range of 0.005 to 0.1 units/ml. Use a suspension of inhibitos free non-fat dry milk for negative control.					
QC Tests – (I)Dehydrated Medium					
Colour :		Beige to bluish grey			
Appearance :		Homogeneous Free Flowing powder			
(II)Rehydrated medium					
pH (post autoclaving/heating) :		7.8 ± 0.2			
Colour (post autoclaving/heating) :		Purple			
Clarity (post autoclaving/heating) :		Slightly opalescent			
(III)Q.C. Test Microbiological					
	MICROORGANISM (ATCC)	GROWTH	INCUBATION TEMPERATURE	TIME	
	Bacillus stearothermophilus (7953)	Good	55 ± 2°C	3-4 hours	
	Bacillus stearothermophilus (7953)	Luxuriant	64 ± 2°C	2-3 hours	
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 rapid detection of trace amounts of Penicillin in milk using Bacillus stearothermophilus as per AOAC.				
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
B280	32g/l	15.625L	7.8 ± 0.2	NIL	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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