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BW347 UREA AGAR BASE (CHRISTENSEN)							
Formula							
Ingredients :	gms/lit.						
Peptic digest of animal tissue	1.50						
Dextrose	1.00						
Sodium chloride	5.00						
Monopotassium phosphate	2.00	.00					
Phenol red	0.012	2					
Agar	15.00)0					
Final pH (at 25°C) : 6.8 <u>+</u> 0.2							
Directions :							
Suspend 24.51 grams in 950 ml distilled water. Heat to boiling to dissolve the medium completely.							
Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically							
add 50 ml of sterile 40% Urea Solution (BF048) and mix well. Dispense into sterile tubes and allow							
to set in the slanting position. Do r	not overheat	or reheat the	medium as urea decomposes very				
easily.							
Principle :							
Peptic digest of animal tissue provi	ides carbon a	and nitrogen r	required for good growth of a wide				
variety of organisms. Dextrose is	included as a	in energy sour	ce. Sodium Chloride maintains the				
osmotic balance of the medium. Ure	ea provides a	source of nitre	ogen for those organisms producing				
urease. This is indicated by a colou	r change of t	he pH indicato	or, Phenol red, from yellow (pH 6.8)				
to red to pink – red (pH 8.1). Agar is the solidifying agent.							
QC Tests – (I)Dehydrated Medium							
Colour :	Ligl	Light pink					
Appearance :	Hor	Homogeneous Free Flowing powder					
(II)Rehydrated medium							
pH (post autoclaving/heating) :	6.8	6.8 ± 0.2					
Colour (post autoclaving/heating)): Yell	Yellowish orange					
Clarity (post autoclaving/heating)	Clarity (post autoclaving/heating) : Clear						
(III)Q.C. Test Microbiological							
Cultural characteristics observed after 18 – 24 hrs. at 35-37°C.							
MICROORGANISM (ATCC)		GROWTH	UREASE				
Enterobacter aerogenes (13048)		Luxuriant	Negative reaction, no change				
Escherichia coli (25922)		Luxuriant	Negative reaction, no change				
Proteus vulgaris (13315)		Luxuriant	Positive reaction, cerise colour				
Salmonella typhimurium (14028)		Luxuriant	Negative reaction, no change				
Proteus mirabilis (12453)		Luxuriant	Positive reaction, cerise colour				
Klebsiella pneumoniae (13883)		Luxuriant	Positive reaction, cerise colour				
Precautions : 1. For Laboratory Use.							
2. Follow proper, established laboratory procedures in handling and disposing o							
infectious materials.							

Refer disclaimer Overleaf

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Limitations :	1. Since the nutritional requirements of organisms vary, some strains may b							
	2. The alkaline reaction produced in this medium after prolonged incubation may not be							
	caused by urease activity. False positive reactions may occur due to the utilization of							
	peptones (especially in slant agar by Pseudomonas aeruginosa, For example) or other							
	proteins which raise the pH due to protein hydrolysis and the relese of excessive amino							
	acid residues. To eliminate possible protein hydrolysis, perform a control test with the							
	same test medium without urea.							
	3. Do not heat or reheat the medium because urea decomposes very easily.							
	4. Urea Agar detects rapid urease activity of only the urease – positive Proteus species.							
	For results to be valid for the detection of Proteus, the results must be read within the							
	first 2 to 6 hours after incubation. Urease – positive Klebsiella, in contrast, hydrolyze							
	urea much more slowly, showing only slight penetration of the alkaline reaction into the							
	butt of the medium in 6 hours and requiring 3 to 5 days to change the reaction of the							
	entire butt.							
Use :	For the detection of urease production, particularly by Proteus vulgaris, Micrococci and							
_	paracolon organisms.							
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.							
Packing :	500 gm. Bottle							
Product profile:	Reconstitution	Quantity on	pH (25°C)	Supplement	Sterilization			
		Preparation (500g)						
BW347	24.51 g/l	20.399L	6.8 <u>+</u> 0.2	40% Urea	121°C / 15 minutes			
				Solution				
				(BF048)				

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. The information contained in this publication is based on our in-house studies and market performance and is to the best of our

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