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B1408	UREA AGAR BASE	UREA AGAR BASE (CHRISTENSEN)						
Formula								
Ingredients:	gms/lit.							
As per ISO 6579-1	s per ISO 6579-1:2017			B1408- Urea Agar Base, Christensen				
Ingredients	g / L	1	ngredients	g/L				
Peptone	1.000	H	Peptone	1.000				
Glucose	1.000	(Glucose	1.000				
Sodium chloride 5.000			Sodium chloride	5.000				
Potassium dihydrogen phosphate 2.000			Potassium dihydrogen phosphate 2.000					
Phenol red	0.012	I	Phenol red	0.012				
Agar	15.00	I	Agar	15.00				
Final pH (at 25°C)	6.8±0.2	H	Final pH (at 25°	C) 6.8±0.2				
$E_{res} = 1 + U_{res} + 25\%$ (2) + 0.2								
Final pri (at 25 °C) : 0.8 ± 0.2 Directions :								
Suspend 24.01 grams in 950 ml purified / distilled water. Heat to boiling to dissolve the medium completely								
Sterilize by autoclaving at 10 lbs pressure (115°C) for 20 minutes. Cool to 45-50°C and aseptically add 50 ml of								
sterile 40% Urea Solution (BF048) and mix well. Dispense into sterile tubes and allow setting in a slanting								
position. Do not overheat or reheat the medium as urea decomposes very easily.								
Principle :								
Peptone is the source of nitrogen and carbon, long chain amino acids, vitamins and other essential nutrients.								
Dextrose is the ene	ergy source. Sodium chlo	oride mainta	ins the osmotic	equilibrium of the medium whereas				
phosphates serve to buffer the medium. Urea is hydrolyzed to liberate ammonia. Phenol red indicator detects the								
alkalinity generated	by visible Colour change	from orange	to pink. Agar is	s the solidifying agent.				
QC Tests – (I)Dehydr	rated Medium							
Со	Colour :		Light yellow to light pink					
Ap	Appearance :		Homogeneous Free Flowing powder					
(II)Rehydrated medium								
pH	pH (post autoclaving/heating) :		6.8 ± 0.2					
Co	Colour(post autoclaving/heating) :		Yellowish orange					
Cla	Clarity(post autoclaving/heating) :		Clear to slightly opalascent					
(III)Q.C. Test Microbiological								
Cultural characteristics observed on addition of 40% urea solution (BF048), after $18 - 24$ hrs.								
at	at 35-37°C.							
MI	CROORGANISM (ATCC)		GROWTH	UREASE				
Es	cherichia coli ATCC 2592	22	Luxuriant	negative reaction no change				
Pro	oteus vulgaris (13315)		Luxuriant	positive reaction, cerise Colour				
Sa	lmonella typhimurium (14	4028)	Luxuriant	negative reaction no change				
Pro	oteus mirabilis (25933)		Luxuriant	positive reaction, cerise Colour				
En	terobacter aerogenes(1304	48)	Luxuriant	negative reaction no change				
Precautions : 1. For Laboratory Use.								
2.	2. Follow proper, established laboratory procedures in handling and disposing of infecti							
ma	materials.							

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Limitations :	1. Prolonged incubation may cause alkaline reaction in the medium.							
	 Also, all urea test media rely on the alkalinity formation and so they are not speci determining the absolute rate of urease activity The utilization of proteins may price the pU to alkalinity due to protein hydrolusis and 							
	of amino acids li	f amino acids liberation results in false positive reaction						
Use :	Recommended for the detection of urease production, particularly by members of the genus Prote							
	The composition and performance criteria are in accordance with ISO 6579-1:2017.							
Storage :	Dehydrated medium- below 30 ° C Prepared mediums– Between 2 to 8°C.							
Packing :	500 gm. Bottle							
Product	Reconstitution	Quantity on	pH (25°C)	Supplement	Sterilization			
profile:		Preparation (500g)	_					
B1408	24.01g/l	20.824L	6.8 <u>+</u> 0.2	40%Urea	115° C / 20 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.

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