B203	HEKTOEN ENTERIC AGAR

Formula

Ingredients :	**gms/lit.**
Proteose peptone	12.00
Yeast extract	3.00
Lactose	12.00
Sucrose	12.00
Salicin	2.00
Bile salt mixture	9.00
Sodium chloride	5.00
Sodium thiosulphate	5.00
Ferric ammonium citrate	1.50
Acid fuchsin	0.10
Bromo thymol blue	0.065
Agar	15.00

Final pH (at 25°C): 7.5 ± 0.2

Directions:

Suspend 76.67 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle :

Proeose Peptone is a source of nitrogen and other nutrients in Hektoen Enteric Agar. Bile Salts and the dyes, bromo thymol blue and acid fuchsin, inhibit gram – positive organisms. Lactose, sucrose and salicin are sources of fermentable carbohydrates. Ferric ammonium citrate, a source of iron, allows production of hydrogen sulfide (H_2S) from sodium thiosulfate. H_2S – positive colonies have black centers. Yeast Extract provides vitamins and cofactors required for growth and additional nitrogen and carbon. Agar is used as a solidifying agent.

QC Tests – (I)Dehydrated Medium			
	Colour :		Cream to yellow with tancast
	Appearance :		Homogeneous Free Flowing powder
(II)Rehydrated medium			
	pH (post autoclaving/heating) :		7.5 ± 0.2
	Colour (post autoclaving/heating) :		Green colour
	Clarity (post autoclaving/heating) :		Clear to slightly opalescent
(III)Q.C. Test Microbiological			
	Cultural characteristics observed after 18- 24 hrs. at 35 -37°C.		
	MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY
	Salmonella enteritidis (13076)	Luxuriant	Greenish blue*
	Salmonella typhimurium (14028)	Luxuriant	Greenish blue*
	Shigella flexneri (12022)	Luxuriant	Greenish blue
	Enterobacter aerogenes (13048)	Fair –good	Salmon – orange
	Escherichia coli (25922)	Fair	Orange (may have bile precipitate)
	Escherichia coli (8739)	Fair	Orange (may have bile precipitate)
	Enterococcus faecalis (29212)	Inhibited	--
	Salmonella Typhi (6539)	Luxuriant	Greenish blue*
	* may have black centres (H_2S production).		

Precautions :	1. For Laboratory Use.
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
	3. IRRITANT. Irritating to eyes, respiratory system and skin. Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective clothing. Keep container tightly closed.

Refer disclaimer Overleaf

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Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
	2. Do not autoclave this medium because excessive heat may alter the ingredients.				
	3. Proteus species may resemble salmonellae or shigellae. Further testing should be conducted to confirm the presumptive identification of organisms isolated on this medium.				
Use :	For differential and selective isolation of Salmonella and Shigella species from enteric pathological specimens				
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
B203	76.67 g/l	6.52 L	7.5 $\pm$ 0.2	Nil	Do not autoclave. Boil to dissolve medium