B533	**GELATIN IRON AGAR**

Formula

Ingredients :	**gms/lit.**
Peptic digest of animal tissue	25.00
Meat extract	7.50
Sodium chloride	5.00
Gelatin	120.00
Ferrous chloride	0.50
Agar	1.00

Final pH (at 25°C) : 7.0 ± 0.2

Directions :

Suspend 15.9 gms in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in test tubes as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle :

The medium consists of nutrients like peptic digest of animal tissue, meat extract and gelatin which provide nitrogen compounds and also the carbon compounds for the growing organisms. Gelatin acts as solidifying agent and is the substrate for the organisms producing gelatinase enzyme. Ferrous chloride aids in the detection of hydrogen sulphide indicated by black precipitate. Few Clostridia show gelatinase activity as well as H_2S production. Gelatin is usually liquefied by Clostridium perfringens within 24 to 48 hours. E.coli grow well on this medium but show neither gelatinase activity nor H_2S production.

QC Tests – (I)Dehydrated Medium				
	Colour :	Yellow		
	Appearance :	Homogeneous Free Flowing powder		
(II)Rehydrated medium				
	pH (post autoclaving/heating) :	7.0 ± 0.2		
	Colour (post autoclaving/heating) :	Light yellow		
	Clarity (post autoclaving/heating) :	Clear to slightly opalescent		
(III)Q.C. Test Microbiological				
	Cultural characteristics observed after 24 - 48 hrs. at 35 -37°C.			
	MICROORGANISM (ATCC)	GROWTH	GELATINASE REACTION	H_2S PRODUCTION
	Clostridium perfringens (12924)	Luxuriant	+	+
	Escherichia coli (25922)	Luxuriant	-	-
	Bacillus subtilis (6633)	Luxuriant	+	-

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 detecting gelatin liquefaction and hydrogen sulphide production.
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
B533	15.9g/l	31.44L	7.0 ± 0.2	nil	121^0C / 15 minutes

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