TECHNICAL SHEET

B1218	**MUG EC O157 AGAR**

FORMULA

Ingredients :	**gms/lit.**
Casein peptone	20.00
Meat extract	2.00
Yeast extract	1.00
Sorbitol	10.00
Ferric ammonium citrate	0.50
Sodium chloride	5.00
Bromothymol blue	0.025
Sodium thiosulphate	2.00
Sodium deoxycholate	1.12
4-Methylumbelliferyl ß-D-Glucuronide (MUG)	0.10
Agar	13.00

Final pH (at 25°C) : 7.4 ± 0.2

Directions :

Suspend 54.74 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes and pour into sterile Petri plates.

Principle :

Sodium deoxycholate inhibits the growth of gram-positive microbes. Sorbitol provides carbon and energy source. Bromothymol blue is the pH indicator. Microorganisms utilizing sorbitol exhibit yellow colonies whereas sorbitol-negative strains such as E.coli O157:H7 grow as greenish colonies. Hydrogen suphide production is detected as black-brown colony colouration due to presence of sodium thiosulphate and ferric ammonium citrate.

QC Tests – (I)Dehydrated Medium		
	Colour :	Cream to yellow
	Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	7.4 ± 0.2
	Colour (post autoclaving/heating) :	Bluish green
	Clarity (post autoclaving/heating) :	clear to slightly opalescent gel

(III)Q.C. Test Microbiological

Cultural characteristics observed after 18 –24 hrs.at 35-37°C.

MICROORGANISM (ATCC)	GROWTH	Colour of colony	Fluorescence (under UV)*
Enterobacter aerogenes (13048)	luxuriant	yellow	negative
Escherichia coli O157:H7	luxuriant	colourless	negative
Escherichia coli (25922)	luxuriant	yellow	positive
Enterococcus faecalis (19433)	inhibited	---	negative
Proteus mirabilis (25933)	luxuriant	brown, may show black colouration	negative
Salmonella Typhimurium (14028)	luxuriant	yellow w/black centre	negative

* - Fluorescence can be visualized on addition of NaOH solution or exposure to ammonia fumes.

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 :	It is recommendedis for isolation and differentiation of enterohaemorrhagic Escherichia coli O157:H7 from foodstuffs, water and clinical samples by a fluorogenic method.
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
B1218	54.74 g/l	9.134 L	7.4 ± 0.2	NIL	121°C/ 15 minutes

Refer disclaimer overleaf

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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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