B1497	MRS AGAR (LACTOBACILLUS MRS AGAR)

Formula

Ingredients :	**gms/lit.**
Peptone	10.00
Beef extract	8.00
Yeast extract	5.00
Ammonium citrate	2.00
Sodium acetate	5.00
Magnesium sulphate, heptahydrate	0.20
Manganese sulphate, tetrahydrate	0.05
Dipotassium phosphate	2.00
Glucose anhydrous	20.00
Polysorbate 80(Tween 80)	1.00
Agar	12.00

Final pH (at 25°C) : 5.7 ± 0.2

Directions :

Suspend 65.13 grams (the equivalent weight of dehydrated medium per litre) 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. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle :

Lactobacillus MRS Agar contains Peptone, Beef extract, Yeast extract. These ingredients supply nitrogen, carbon and other elements necessary for growth. Polysorbate 80, Acetate, Magnesium and Manganese sulphate provide growth factors for culturing a variety of lactobacilli. The above ingredients may inhibit the growth of some organisms other than lactobacilli.

QC Tests – (I)Dehydrated Medium		
	Colour :	Cream to light yellow
	Appearance :	Homogeneous free flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	5.7 ± 0.2
	Colour (post autoclaving/heating) :	Medium to dark amber
	Clarity (post autoclaving/heating) :	Clear to slightly opalescent
(III) Q.C. Test Microbiological		

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours (longer if neccesary) (with 5% CO2)

MICROORGANISM (ATCC)	GROWTH
Lactobacillus acidophilus (19992)	Luxuriant
Lactobacillus fermentum (9338)	Luxuriant
Lactobacillus plantarum (8014)	Luxuriant
Lactococcus lactis (19435)	None-poor
Lactobacillus casei (9595)	Luxuriant
Lactococcus sakei (15521)	Luxuriant
Pediococcus damnosus (29358)	Luxuriant
Pediococcus pentosaceus (33316)	Luxuriant
Bifidobacterium bifidum* (11863)	Luxuriant
Escherichia coli (25922)	Inhibition
Bacillus cereus (11778)	Inhibition

Key *- Growth under anaerobic conditions for 72 hours.

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.
	2. Organisms other than lactobacilli may grow in these media. Isolates must be confirmed as lactobacilli by appropriate biochemical testing.

Use :	For the isolation and enumeration of lactobacilli from meat and meat products. The composition and performance criteria of this medium are as per the specifications laid down in ISO 1995, Draft ISO/DIS 13720				
Storage :	Dehydrated medium and prepared medium – Between 2 to 8°C.				
Packing :	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1497	65.13g/l	7.676 L	5.7 ± 0.2	NIL	121^0C / 15 minutes