



## Universal Fastidious Culture Agar

M1817

Universal Fastidious culture Agar can be used for the cultivation of fastidious microorganisms when enriched with blood.

### Composition\*\*

Ingredients	Gms / Litre
Meat peptone	5.000
Gelatin peptone	5.000
Casein peptone	3.500
Casein enzymic hydrolysate	3.500
Yeast extract	3.000
Sodium chloride	5.000
Agar	10.000

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 35 grams in 1000ml distilled water. Heat to boiling to dissolve the medium completely. Dispense as desired and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. The medium can be enriched by adding 5-10 % defibrinated sheep or horse blood to the cooled base medium. Mix well and pour into sterile Petri plates.

### Principle And Interpretation

Universal Fastidious Culture Agar is a basic culture media for cultivation of fastidious organisms by enriching the basal medium with blood. It is non-selective media useful in routine cultivation of microorganisms. It can be used for the cultivation and enumeration of bacteria which are not particularly fastidious. Addition of different biological fluids such as horse or sheep blood, serum, egg yolk etc. makes it suitable for the cultivation of related fastidious organisms.

Meat peptone, gelatin peptone, casein peptone and yeast extract provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients necessary for the growth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

### Quality Control

#### Appearance

Cream to yellow homogeneous free flowing powder

#### Gelling

Firm, comparable with 1.5% Agar gel

#### Colour and Clarity of prepared medium

Basal Medium : Light yellow coloured clear to slightly opalescent gel. After addition of 5-7% w/v sterile defibrinated blood : Cherry red coloured opaque gel forms in Petri plates

#### Cultural response

Cultural characteristics was observed after an incubation for Bacterial at 30-35°C 18-24 hours and for Fungal at 20-25°C <=5day's.

#### Cultural Response

Organism	Inoculum (CFU)	Growth	Recovery	Growth w/ blood	Recovery w/ blood	Haemolysis
<b>Cultural response</b>						
<i>Streptococcus pyogenes</i> ATCC 19615	50 -100	luxuriant	>=70 %	luxuriant	>=70 %	
<i>Staphylococcus aureus</i> ATCC 25923	50 -100	luxuriant	>=70 %	luxuriant	>=70%	beta
<i>Enterococcus durans</i> ATCC 10541	50 -100	luxuriant	>=70 %	luxuriant	>=70 %	alpha

<i>Enterococcus faecalis</i> ATCC 50 -100 29212	luxuriant	>=70 %	luxuriant	>=70 %	none
<i>Salmonella Typhimurium</i> 50 -100 ATCC 13311	luxuriant	>=70 %	luxuriant	>=70 %	
<i>Shigella flexneri</i> ATCC 12022	luxuriant	>=70 %	luxuriant	>=70%	none

### Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Revision : 1 / 2011



#### Disclaimer :

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