

# MAST® Culture Media and Supplements

## Technical Information Sheet

Product Code DM 140



## MacConkey Agar (without salt)

A selective medium for the isolation and identification of enteric bacteria.

### 1. Description

MAST MacConkey Agar without salt is a selective and differential identification medium. It is used for the isolation of enteric bacteria from faeces and is used in water testing. Cultivated organisms are differentiated on the basis of their lactose fermentation, which is demonstrated by pink colonies and non-lactose fermentation, by white or colourless colonies. A highly purified

and carefully selected grade of bile salts is used to give good inhibition of nonenteric bacteria and excellent survival of enteric organisms. The medium will support the growth of most staphylococci. Colour differentiation is good, and enterococci stand out clearly. The absence of salt from the medium suppresses the swarming of most *Proteus* spp.

### 2. Directions

1. Suspend by swirling 44.5g of powder in 1 litre or the contents of the sachet in the stated volume of distilled or deionised water.
2. Autoclave at 121°C (15 p.s.i.) for 15 minutes.
3. Mix well before pouring.

### 3. Typical Formula\*

Formula	grams per litre
Selected peptone mixture	18.0
Lactose	10.0
Bile salts (RM25)	0.5
Neutral red	0.05
Agar	16.0
<b>pH approx.7.3</b>	

## 4. In Use

Colony characteristics after 18 hours incubation.

Species	Colony Colour	Colony Nature
<b>Lactose fermenting organisms</b>		
<i>E.coli</i>	Pink	Non mucoid translucent
<i>Kl.pneumoniae</i>	Pink	Mucoid translucent
<i>Strept.faecalis</i>	Magenta	Small
<i>Staphylococci</i>	Opaque Pink	Small
<b>Late lactose fermenting organisms</b>		
<i>Sh.sonnei</i>	Colourless or pale pink. Turning pink after 40 hours incubation	Translucent
<b>Non-lactose fermenting organisms</b>		
<i>Salmonellae</i>	Colourless or pale	Translucent
Shigellae e.g. <i>Sh.flexneri</i>	Colourless or pale	Translucent



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\*Formulation may be modified to meet performance criteria

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