

# MAST® Culture Media and Supplements

## Technical Information Sheet

**Product Code DM 111**



## C.L.E.D. with Andrade's Indicator

A modified C.L.E.D. medium for the investigation of urinary infections.

### 1. Description

In an attempt to combine the advantages of the C.L.E.D medium described by Mackey and Sandys (1966)<sup>1</sup> with the ease of differentiation of MacConkey's medium, Bevis (1968)<sup>2</sup> proposed the addition to C.L.E.D. medium of acid fuchsin. This modification, on which the MAST medium is based, made it easier to identify colonial

types and differentiate between lactose and nonlactose fermenters. Mixed cultures of different organisms are more obvious, and tests such as coagulase, oxidase, catalase and agglutination with specific sera, can be performed on primary isolates from this medium.

### 2. Typical Formula\*

Formula	grams per litre
Peptone mixture	13.85
Lactose	8.5
L-cystine	0.128
L-cysteine	0.4
Bromothymol blue	0.02
Agar (RM10)	15.0

**pH approx. 7.3**

### 3. Directions

1. Suspend by swirling 35.2g of powder in 1 litre or the contents of the sachet in the stated amount of distilled or deionised water.
2. Autoclave at 121°C (15p.s.i.) for 15 minutes.
3. Thoroughly mix before pouring

### 4. In Use

MAST C.L.E.D. with Andrade's Indicator can be used in conjunction with MAST Bacteruritest Strips (BTR1) for the screening of urine cultures.

Incubation of plates at 37°C should be continued for 18-24 hours but no longer, otherwise the medium may begin to turn pink. If use of a CO<sub>2</sub> incubator is envisaged, the final pH of the medium should be adjusted to over 7.5.

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\*Formulation may be modified to meet performance criteria

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### Colonial appearance after 18 hours at 37 °C (Bevis 1968)\*\*

<i>E.coli</i>	Bright pink semi-translucent colonies with a surrounding pink halo in the medium.
<i>P.mirabilis</i> <i>K.aerogenes</i> <i>Staph.aureus</i>	Blue/green translucent colonies. Grey/blue mucoid colonies Smooth, entire, opaque, bright golden yellow colonies. Lactose fermenting varieties have a surrounding pink halo in the medium.
<i>Staph.albus</i>	Smooth, entire, opaque, porcelain white or pale pink colonies
<i>Strep.faecalis</i>	Similar to <i>Staph.aureus</i> but smaller and much deeper orange yellow colour
<i>Strep.pyogenes</i>	Small opaque grey/green colonies.

## 5. References

1. Mackey JP, Sandys GH. *Br med J.* 1965; **2**: 1286-1288.
2. Bevis TD. *J Med Lab Technol.* 1968; **25**: 38- 41.



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