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OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION		
CLED MEDIUM (CM0301)		

## CLED MEDIUM

CM0301

### Typical Formula\*

Peptone	grams per litre	4.0
'Lab-Lemco' powder		3.0
Tryptone		4.0
Lactose		10.0
L-Cystine		0.128
Bromothymol blue		0.02
Agar		15.0


\* adjusted as required to meet performance standards

### Directions

Suspend 36.2g in 1 litre of distilled water. Bring to the boil to dissolve completely. Sterilize by autoclaving at 121°C for 15 minutes. Cool to 50°C. Mix well and pour into sterile Petri dishes.

### Physical Characteristics

Pale green or straw, free-flowing powder  
 Colour on reconstitution - blue/green  
 Moisture level - less than 7%  
 pH 7.3 ± 0.2 at 25°C  
 Clarity - clear  
 Gel strength - firm, comparable to 15.0g/litre of agar

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### Microbiological Tests Using Optimum Inoculum Dilution

Control Media: Tryptone Soya Agar or Columbia Blood Agar Base enriched with 5% v/v horse blood, where appropriate

### Reactions after incubation at 37°C for 18 hours

Medium is challenged with 10-100 colony-forming units

<i>Enterococcus faecalis</i>	ATCC® 19433	0.25-1mm yellow colonies
<i>Proteus mirabilis</i>	NCTC 10975	0.25-1mm translucent blue colonies, no swarming
<i>Salmonella typhimurium</i>	ATCC® 14028	1-2mm blue colonies

A satisfactory result is represented by recovery of positive strains equal to or greater than 70% of the control medium.

### Reactions after incubation at 37°C for 48 hours

<i>Lactobacillus fermentum</i>	ATCC® 9338	0.5-1mm yellow colonies
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A satisfactory result is represented by recovery of positive strains equal to or greater than 70% of the control medium.


### Reactions after incubation at 37°C for 18 hours

Medium is challenged with 1E+04 to 1E+06 colony-forming units

Inoculation with mixed culture using diminishing sweep technique

*Proteus mirabilis* NCTC 10975 and *Escherichia coli* ATCC® 25922

In mixed culture, a satisfactory result is represented by a positive diagnostic reaction of *Proteus mirabilis* NCTC 10975 and *Escherichia coli* ATCC® 25922. Clear differentiation between lactose and non-lactose fermenters shall be seen.

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**Testing performed in accordance with current CLSI M22 A**

**Reactions after incubation at 35°C for 18-24 hours**

Medium is challenged with 10-100 colony-forming units

<i>Escherichia coli</i>	ATCC® 25922	1-2mm yellow colonies
<i>Staphylococcus aureus</i>	ATCC® 25923	0.5-1mm yellow colonies
<i>Proteus vulgaris</i>	ATCC® 8427	0.25-1mm translucent blue colonies, no swarming

A satisfactory result is represented by recovery of positive strains equal to or greater than 70% of the control medium.

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## Revision History

Section / Step	Description of Change	Reason for Change	Reference
Entire Document	<ul style="list-style-type: none"> <li>Update to include testing of CLSI M22 A</li> <li>Update to new document template</li> <li>Update to test specification</li> </ul>	Change control	BT-CC-0524 BT-CC-1604