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OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION		
MEMBRANE LACTOSE GLUCURONIDE AGAR (MLGA) CM1031		

MEMBRANE LACTOSE GLUCURONIDE AGAR (MLGA)

CM1031

Typical Formula*

grams per litre

Peptone	40.0
Yeast extract	6.0
Lactose	30.0
Phenol red	0.2
Sodium lauryl sulphate	1.0
Sodium pyruvate	0.5
X-glucuronide	0.2
Agar	10.0

* adjusted as required to meet performance standards

Directions

Suspend 88g 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

Straw/orange, free-flowing powder

Colour on reconstitution - red

Moisture level - less than or equal to 7%

pH - 7.4 ± 0.2 at 25°C

Clarity - clear

Gel strength - firm, comparable to 10.0g/litre of agar

Microbiological Tests Using Optimum Inoculum Dilution

Control Medium: Tryptone Soya Agar

Reactions after incubation at 37°C for 18 hours

Medium is challenged with 10-100 colony-forming units

Inoculation using membrane filtration technique

<i>Escherichia coli</i>	ATCC® 11775	1-3mm green colonies
<i>Escherichia coli</i>	ATCC® 10536	1-3mm green colonies
<i>Enterobacter aerogenes</i>	ATCC® 13048	1-3mm orange/yellow colonies

A satisfactory result is represented by recovery of positive strains equal to or greater than 50% of the control medium.

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Medium is challenged with greater than 1E+04 colony-forming units

<i>Bacillus subtilis</i>	ATCC®6633	No growth
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Negative strains are inhibited.

Inoculation with mixed cultures

Membrane filter 10ml volumes of suitable dilutions of a suspension containing *Escherichia coli* ATCC®25922, *Klebsiella pneumoniae* ATCC®29665 and *Pseudomonas aeruginosa* ATCC®27853. Place membrane directly on the agar surface and incubate at 37°C for 18 hours.

Medium is challenged with 10-100 colony-forming units of each strain

<i>Escherichia coli</i>	ATCC®25922	1-3mm green colonies
<i>Klebsiella pneumoniae</i>	ATCC®29665	2-4mm yellow colonies
<i>Pseudomonas aeruginosa</i>	ATCC®27853	1-3mm pink colonies

A satisfactory result is represented by recovery of positive strains equal to or greater than 50% of the control medium.

Differentiation shall be comparable to the standard after incubation.

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Revision History

Section / Step	Description of Change	Reason for Change	Reference
Entire Document	Update to new document format and correction of typographical/minor errors. Addition of Control Medium and Result Criteria.	Change control	BT-CC-1927