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OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION		
MACCONKEY AGAR NO.3 (CM0115)		

MACCONKEY AGAR NO.3

CM0115

Typical Formula*

Peptone	grams per litre	20.0
Lactose		10.0
Bile salts No.3		1.5
Sodium chloride		5.0
Neutral red		0.03
Crystal violet		0.001
Agar		15.0

* adjusted as required to meet performance standards

Directions

Suspend 51.5g 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, free-flowing powder
 Colour on reconstitution - dark red
 Moisture level - less than 7%
 pH 7.1 ± 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 Medium: Tryptone Soya Agar

Reactions after incubation at 37°C for 18-24 hours

Medium is challenged with 10-100 colony-forming units

<i>Escherichia coli</i>	ATCC® 8739	0.5-2mm pink colonies and bile precipitation
<i>Salmonella virchow</i>	NCTC 5742	1-3mm straw colonies
<i>Salmonella abony</i>	NCTC 6017	1-3mm straw colonies
<i>Shigella sonnei</i>	ATCC® 25931	1-4mm straw colonies
<i>Shigella boydii</i>	NCTC 11462	1-4mm straw colonies
<i>Proteus mirabilis</i>	ATCC® 29906	1-4mm straw colonies, slight/no swarming

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

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

<i>Staphylococcus aureus</i>	ATCC® 6538	No growth
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Negative strains are inhibited.

Equivalent results are obtained after incubation at 30-35°C for 18-24 hours.

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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>Proteus mirabilis</i>	ATCC® 12453	1-4mm straw colonies, no swarming
<i>Salmonella typhimurium</i>	ATCC® 14028	1-3mm straw colonies
<i>Escherichia coli</i>	ATCC® 25922	0.5-2mm pink colonies and bile precipitation

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

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

<i>Enterococcus faecalis</i>	ATCC® 29212	No growth
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Negative strains are inhibited

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Revision History

Section / Step	Description of Change	Reason for Change	Reference
Entire Document	Update to new document template and addition of CLSI M22 A section	Change control	BT-CC-1602