

Distribution: Central File

Date: 19/05/17

Supersedes: 29/05/14

OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION

MacCONKEY AGAR No.2

CM0109

Typical Formula*

Peptone	grams per litre	20.0
Lactose		10.0
Bile salts No.2		1.5
Sodium chloride		5.0
Neutral red		0.05
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

Pink, free-flowing powder
 Colour on reconstitution - dark red
 Moisture level - less than 7%
 pH 7.2 ± 0.2 at 25°C
 Clarity - clear
 Gel strength - firm, comparable to 15.0g/litre of agar

Microbiological Tests Using Optimum Inoculum Dilution

Control Medium: Tryptone Soya Agar

Reactions after incubation at 37°C for 24 hours

Medium is challenged with 10-100 colony-forming units

<i>Escherichia coli</i>	ATCC® 25922	1-3mm pink colonies
<i>Salmonella typhimurium</i>	ATCC® 14028	1-3mm straw colonies
<i>Salmonella virchow</i>	NCTC 5742	1-3mm straw colonies
<i>Shigella boydii</i>	NCTC 11462	1-4mm straw colonies
<i>Shigella dysenteriae</i>	NCTC 9721	0.25-1mm straw colonies
<i>Pseudomonas aeruginosa</i>	ATCC® 27853	1-4mm straw colonies
<i>Proteus mirabilis</i>	ATCC® 12453	1-3mm straw colonies, 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® 25923	No growth
<i>Staphylococcus aureus</i>	ATCC® 9144	No growth

Negative strains are inhibited.

Reactions after incubation at 37°C for 48 hours

Medium is challenged with 10-100 colony-forming units

<i>Enterococcus faecalis</i>	ATCC® 19433	Pinpoint-1mm pink colonies, red centre
<i>Enterococcus faecalis</i>	ATCC® 29212	Pinpoint-1mm pink colonies, red centre

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