OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION

MANNITOL SALT AGAR CM0085/CB0085

MANNITOL SALT AGAR **CM0085**
MANNITOL SALT AGAR **CB0085**

Typical Formula*

'Lab-Lemco' powder	grams per litre	1.0
Peptone		10.0
Mannitol		10.0
Sodium chloride		75.0
Phenol red		0.025
Agar		15.0

* adjusted as required to meet performance standards

Directions

Suspend 111g 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/pink, free-flowing powder
Colour on reconstitution - red
Moisture level - less than or equal to 7%
pH 7.5 ± 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 36 hours

Medium is challenged with 10-100 colony-forming units

Staphylococcus aureus	ATCC®25923	0.5-2mm yellow colonies with yellow halo
Staphylococcus aureus	ATCC®6538	0.5-2mm yellow colonies with yellow halo
Staphylococcus aureus MRSA	NCTC10442	0.75-4mm yellow colonies with yellow halo
Staphylococcus epidermidis	ATCC®12228	0.5-2mm pink colonies and pink medium

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A satisfactory result is represented by recovery of positive strains equal to or greater than 70% of the control medium. *Staphylococcus epidermidis* should produce colonies with a negative diagnostic reaction (i.e. pink colonies and medium).

Medium is challenged with 1E+02 to 1E+03 colony-forming units

Proteus mirabilis	ATCC®29906	Pinpoint to 2mm pink colonies, no swarming

For *Proteus* spp., a satisfactory result is represented by recovery equal to or greater than 40% of the control medium.

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

Escherichia coli	ATCC®25922	No growth

Negative strains are inhibited.

Medium is challenged with 1E+03 to 1E+04 colony-forming units

Escherichia coli	ATCC®8739	No growth or pinpoint - 0.5mm yellow colonies

Escherichia coli ATCC®8739 is inhibited or shall produce colonies with a negative diagnostic reaction.

Testing performed in accordance with current CLSI M22 A

Reactions after incubation at 35°C for 36 hours

Medium is challenged with 10-100 colony-forming units

Proteus vulgaris	ATCC®8427	Pinpoint to 2mm pink colonies, no swarming

For *Proteus* spp., a satisfactory result is represented by recovery equal to or greater than 40% of the control medium.

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Revision History

Section / Step	Description of Change	Reason for Change	Reference
Document title	Addition of CB0085	Implementation of IVDR requirements for CB0085	MOC-2022-0873
Entire document	Update to current format	Change control	MOC-2022-1014
Microbiological characteristics	Increase of colony size for *Staphylococcus aureus* NCTC10442		