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OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION		
M.R.S. (ISO) AGAR CM1153		

M.R.S. (ISO) AGAR

CM1153

Typical Formula*

Enzymatic digest of casein	grams per litre	10.0
Meat extract		10.0
Yeast extract		4.0
Tri-ammonium citrate		2.0
Sodium acetate		5.0
Magnesium sulphate heptahydrate		0.2
Manganese sulphate tetrahydrate		0.05
Di-potassium hydrogen phosphate		2.0
Sorbitan mono-oleate		1.08
Glucose		20.0
Agar		12.37

*adjusted to meet performance standards

Directions

Suspend 66.7g in 1 litre of distilled water. Bring to the boil to dissolve completely. Sterilize by autoclaving at 121°C for 15 minutes. Mix well and pour into sterile Petri dishes.

Physical Characteristics

Dark straw, free-flowing powder
 Colour on reconstitution – brown/orange
 Moisture level- less than or equal to 7%
 pH 5.7 ± 0.1 at 25°C
 Clarity - clear
 Gel strength - firm comparable to 12.37g/litre of agar

Microbiological Tests Using Optimum Inoculum Dilution

Control Medium: M.R.S. Agar or Tryptone Soya Agar

Reactions after incubation at 30 ± 2°C for 72 ± 3 hours under microaerophilic conditions

Medium is challenged with 10-100 colony-forming units

Lactobacillus gasseri

ATCC®19992

0.5-2mm pale straw 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.

Testing performed in accordance with ISO11133:2014

Reactions after incubation at $30 \pm 2^{\circ}\text{C}$ for 72 ± 3 hours under microaerophilic conditions

Medium is challenged with 50-120 colony-forming units


<i>Lactobacillus sakei</i>	ATCC®15521	WDCM00015	0.5-2mm pale straw colonies
<i>Lactococcus lactis</i>	ATCC®19435	WDCM00016	0.5-2mm cream colonies
<i>Pediococcus pentosaceus</i>	ATCC®33316	WDCM00158	ppt-3mm cream colonies

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

Medium is challenged with $1\text{E}+04$ to $1\text{E}+06$ colony-forming units

<i>Escherichia coli</i>	ATCC®25922	WDCM00013	No growth
<i>Escherichia coli</i>	ATCC®8739	WDCM00012	No growth
<i>Bacillus cereus</i>	ATCC®11778	WDCM00001	No growth

Negative strains are inhibited.

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Revision History

Section / Step	Description of Change	Reason for Change	Reference
Entire document	Creation of new document	Change control	BT-CC-1368
Typical formula/ Physical characteristics	Correction of typographical errors. pH range changed to the correct limits.	Change control	BT-CC-2783