

Distribution: Central File

Date: 03/05/11

Supersedes: 27/11/09

**OXOID QUALITY ASSURANCE  
PRODUCT SPECIFICATION**

**RAKA-RAY AGAR****CM0777****Typical Formula\***

Yeast extract	grams per litre	5.0
Tryptone		20.0
Liver concentrate		1.0
Maltose		10.0
Fructose		5.0
Glucose		5.0
Betaine HCl		2.0
Di-ammonium hydrogen citrate		2.0
L-Aspartic acid		2.5
L-Glutamic acid		2.5
Magnesium sulphate .7H <sub>2</sub> O		2.0
Manganese (II) sulphate .4H <sub>2</sub> O		0.66
Potassium phosphate		2.0
N-Acetyl glucosamine		0.5
Agar		17.0

\* adjusted as required to meet performance standards

**Directions**

Suspend 77.1g in 1 litre of distilled water. Add 10ml of sorbitan mono-oleate and 7ml of Cycloheximide 0.1% Solution (SR0222C). Bring to the boil to dissolve completely. Sterilize by autoclaving at 121°C for 15 minutes. Cool to 50°C and aseptically add 3ml of phenylethanol. Mix well and pour into sterile Petri dishes or distribute into 4ml volumes held at 50°C if the overlay technique is to be used.

**Physical Characteristics**

Straw, free-flowing powder  
 Colour on reconstitution - orange to dark orange  
 Moisture level - less than 7%  
 pH 5.4 ± 0.2 at 25°C  
 Clarity - clear  
 Gel strength - firm, comparable to 17.0g/litre of agar

**Microbiological Tests Using Optimum Inoculum Dilution**

Control Medium: MRS Agar

**Reactions after incubation at 30°C for 4 days under anaerobic conditions  
 (for details, refer to Oxoid Manual - Atmosphere Generation Systems)**

Tested with the addition of sorbitan mono-oleate, cycloheximide and phenylethanol

Medium is challenged with 10-100 colony-forming units

<i>Lactobacillus brevis</i>	ATCC® 14869	1-3mm cream/white colonies
<i>Lactobacillus buchneri</i>	ATCC® 11307	1-3mm cream/white colonies
<i>Pediococcus acidilactici</i>	ATCC® 8042	1-3mm cream/white 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 1E+04 to 1E+06 colony-forming units

<i>Escherichia coli</i>	ATCC® 25922	No growth
-------------------------	-------------	-----------

Negative strains are inhibited