



R2A-Agar

Version: 07/2022
M&S item numbers: 4125 (25 x 20 ml) and 5095 (4 x 250 ml)
Profile: Glass tubes and polycarbonat bottles
Color: Opaque
Storage: Dark and dry at 4 – 12 °C
Shelf life: 8 months after production

Description and application range

R2A-Agar is used for the total colony count of mesophilic, heterotrophic microorganisms in water and other samples. R2A-agar is a medium with low nutrient concentration, which, in combination with the long incubation time at low incubation temperature, allows slow growing organisms to develop without being suppressed by fast growing organisms. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd. 2:2020 standard.

Typical composition

Enzymatic digest of casein	1.0 g/l
Yeast extract	0.5 g/l
Dextrose	0.5 g/l
Soluble starch	0.5 g/l
Di-potassium hydrogen phosphate	0.3 g/l
Magnesium sulfate	0.024 g/l
Sodium pyruvate	0.3 g/l
Bacteriological Agar	12.0 g/l

Final pH: 7.0 ± 0.2 at 25 °C

Microbiological quality control

Bacterial contamination

Incubation: aerobically at room temperature for 5 days, specification: no growth



Productivity quantitative analysis

Incubation at 30 ± 1 °C for 5 days, approx. inoculum: 50 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Escherichia coli</i>	WDCM 00012	$P_R \geq 0.7$	Beige colonies
<i>Escherichia coli</i>	WDCM 00013	$P_R \geq 0.7$	Beige colonies
<i>Bacillus subtilis</i>	WDCM 00003	$P_R \geq 0.7$	Beige colonies
<i>Enterococcus faecalis</i>	WDCM 00009	$P_R \geq 0.7$	Beige colonies
<i>Pseudomonas aeruginosa</i>	WDCM 00024	$P_R \geq 0.7$	Beige colonies

P_R productivity rate (recovery rate)