

R2A AGAR

A medium for the enumeration of heterotrophic organisms in water (EP).

TYPICAL FORMULA (G/L)

Yeast Extract.....	0,5
Proteose Peptone.....	0,5
Acid Digest of Casein.....	0,5
Glucose.....	0,5
Soluble Starch.....	0,5
Dipotassium Phosphate.....	0,3
Magnesium Sulphate.....	0,024
Sodium Pyruvate.....	0,3
Agar.....	12

DIRECTIONS FOR POWDERED MEDIUM

Suspend 15,15 g in 1000 ml of cold distilled water, heat to boiling with frequent agitation and sterilise by autoclaving at 121°C for 15 minutes. Cool to 45°-50°C. Mix well and pour into sterile Petri dishes.

final pH 7.2 ± 0.2

DIRECTIONS FOR BOTTLED MEDIUM

Dissolve the contents of the bottle in a temperature controlled water batch (100°C). Cool to 45-50°C, mix well and distribute into sterile Petri dishes.

final pH 7.2 ± 0.2

DESCRIPTION

R2A Agar is a culture medium with low peptones concentration for the enumeration of heterotrophic bacteria. R2A Agar is prepared according to the formulation recommended by European Pharmacopoeia (ed. 4.6). R2A Agar, used at lower incubation temperatures over a longer period, will recover some organisms which are stressed or chlorine tolerant, leading a more realistic estimate of bacterial numbers.

TECHNIQUE

Follow the usual standard methods for the sample collection and testing. Inoculate the plates by the poured plate technique or by spread plate technique or by membrane filtration.

For the enumeration of heterotrophic bacteria in purified water EP recommends an incubation at 30-35°C for 5 days. The inoculated plates can be incubated also for 5-7 days at 20°C or 28°C, or for 3 days at 35°C

User quality assurance (25°C-72 h)

E. coli ATCC 25922: growth

S. aureus ATCC 25923: growth

E. faecalis ATCC 29212: growth

Incubation for 72 h at 30°C

STORAGE

Dehydrated medium: 10-30°C

Ready to use flasks and tubes: 2-8°C

User prepared plates: up to 7days at 2-8°C

REFERENCES

- APHA (1985) - Standard Methods for the Examination of Water and Wastewater, 16th edition.
- European Pharmacopoeia (EP) 3rd Edition. Supplement 4.6, 2004.

PACKAGING

Powdered medium

4019962 **R2A Agar,** **500 g (33,1 l)**

Ready to use medium in flask

5119963 **R2A Agar,** **6 x 200 ml**

5119962 **R2A Agar,** **6 x 100 ml**

Ready to use medium in tubes

551996Q **R2A Agar,** **20 x 15 ml**

