



Reinforced Clostridial Agar

LAB 23

Description

This is a solidified version of R.C.M. (LAB 22) and can be used for the enumeration of anaerobes by pour plate, shake tube or membrane filtration methods. When solidified in tubes or bottles with minimal head space it can be used for anaerobic culture without the need for anaerobic atmosphere.

Typical Formula	g/litre
Yeast Extract	3.0
Beef Extract	10.0
Peptone	10.0
Glucose	5.0
Soluble Starch	1.0
Sodium chloride	5.0
Sodium acetate	3.0
L-Cysteine hydrochloride	0.5
Agar No. 2	12.0

Method for reconstitution

Weigh 49.5 grams of powder, disperse in 1 litre of deionised water, allow to soak for 10 minutes, swirl to mix then sterilise for 15 minutes at 121°C. Cool to 47°C. and distribute into sterile dishes or tubes containing decimal dilutions of the sample under test.

Appearance: Pale straw, translucent gel.

pH: 6.8 ± 0.2

Minimum Q.C. organisms: *C. perfringens* WDCM 00007

Storage of Prepared Medium: Capped container – up to 3 months at 15-20°C in the dark.

Inoculation: Pour plate technique or tube culture.

Incubation: 30°C for up to 72 hours. Anaerobic conditions for pour plate. Count as early as possible as prolonged incubation may result in the medium being disrupted due to gas production.

Interpretation: Count all colonies as presumptive clostridia.

References

Miller, N.J., Garrett, O.W. and Prickett, P.S. (1939). Anaerobic technique – a modified deep agar shake. Food Res. 4: 447-451. Ingram, M. and Barnes, E.M. (1956). A simple modification of the deep shake tube for counting anaerobic bacteria. Lab. Pract. 5: 145.