



## ***M.R.S. Broth***

*(de Man, Rogosa and Sharpe Broth)*

### **LAB 94**

#### **Description**

A medium for the cultivation and enumeration of *Lactobacillus* spp. this product has the same formulation as LAB 93 M.R.S. agar with the omission of agar. The medium can be used for confirmatory tests on organisms isolated on M.R.S. agar. The medium can also be used for enumeration by the Miles and Misra technique.

<b>Formula</b>	<b>g/litre</b>
Mixed Peptones	10.0
Yeast Extract	5.0
Beef Extract	10.0
Glucose	20.0
Potassium phosphate	2.0
Sodium acetate	5.0
Magnesium sulphate	0.2
Manganese sulphate	0.05
Tween® 80	1.08
Ammonium citrate	2.0

#### **Method for reconstitution**

Weigh 55 grams of powder, disperse in 1 litre of deionised water. Allow to soak for 10 minutes, swirl to mix then warm to completely dissolve solids. Dispense into suitable tubes or bottles then sterilise by autoclaving at 121°C for 15 minutes.

**Appearance:** Light amber, clear.

**pH:** 6.4 ± 0.2

Minimum Q.C. organisms: *Lactobacillus acidophilus*

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

**Inoculation:** Either with suspect colonies from M.R.S. agar or with serial dilutions of test material.

**Incubation:** 25°C microaerobically for 2-5 days.

**Interpretation:** For enumeration purposes count tubes showing signs of growth as positive.

#### **References**

de Man, J.C., Rogosa, M. and Sharpe, M.E. (1960). A medium for the cultivation of lactobacilli. J. Appl. Bacteriol. 23, 130-135.