# **Nutrient Rich Broth**



Medium used for the cultivation and enumeration of sulfate reducing bacteria.

# CONTENTS (Liter)

Magnesium Sulfate	4.12 g
Sodium Citrate	5.0 g
Calcium Sulfate	1.26 g
Ammonium Chloride	1.0 g
Dipotassium Phosphate	1.0 g
Yeast Extract	1.0 g
Final pH = $7.2 \pm 0.2$ at $25^{\circ}$ C	

#### PROCEDURE

Suspend 13.38 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Add 3.5 mL of Sodium Lactate Solution (MB-S0742). Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. If necessary, add 10 mL of 5% ferrous ammonium sulfate solution (0.5 g/L). Mix well. Pour into tubes.

## INTERPRETATION

Nutrient Rich Broth is a medium used for the cultivation and enumeration of sulfate reducing bacteria. Magnesium sulfate, sodium citrate, calcium sulfate, ammonium chloride provide essential ions. Dipotassium phosphate is the buffering agent. Yeast extract provides vitamins.

#### TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 20 - 30°C for 5 - 7 days under anaerobic condition. Refer appropriate references for recommended test procedure.

#### QUALITY CONTROL FOR USE

<u>Dehydrated medium</u>

Appearance: free-flowing, homogeneous

Color: very light beige <a href="Prepared medium">Prepared medium</a>

Appearance: clear to slightly opalescent

Color: colorless

Incubation conditions: 20 - 30°C / 5 - 7 days under anaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth
Desulfovibrio desulfuricans	29577	heavy	good

## STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

### REFERENCES

- 1. Eaton A. D., Clesceri L. S. and Greenberg A. W., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st Ed., APHA, Washington, D.C.
- 2. Starkey R.L. 1937, J. Bacteriol., 33:545

### PACKAGE

Cat. No : MB-N0632 Nutrient Rich Broth	500 G
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