

**924b. METHANOSARCINA MB MEDIUM (1 g/l NaCl)**

NaCl	1.00	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	1.00	g
KCl	0.50	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.40	g
K <sub>2</sub> HPO <sub>4</sub>	0.40	g
NH <sub>4</sub> Cl	1.00	g
Trace element solution (see medium 141)	10.00	ml
Yeast extract (OXOID)	2.00	g
Trypticase peptone (BD BBL)	2.00	g
Na-resazurin solution (0.1% w/v)	0.50	ml
NaHCO <sub>3</sub>	4.00	g
Na-formate	6.80	g
Na-acetate	1.60	g
Vitamin solution (see medium 141)	10.00	ml
L-Cysteine-HCl x H <sub>2</sub> O	0.25	g
Na <sub>2</sub> S x 9 H <sub>2</sub> O	0.25	g
Distilled water	1000.00	ml

Dissolve ingredients (except bicarbonate, formate, acetate vitamins, and reducing agents), then sparge medium with 80% N<sub>2</sub> and 20% CO<sub>2</sub> gas mixture for 30 – 45 min to make it anoxic. Add solid bicarbonate, adjust pH to 6.8 - 7.0, dispense medium under 80% N<sub>2</sub> and 20% CO<sub>2</sub> gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add formate, acetate, vitamins (sterilized by filtration), cysteine and sulfide from sterile anoxic stock solutions prepared under 100% N<sub>2</sub> gas. The pH of the complete medium should be 7.2.

For [DSM 27722](#) omit formate and acetate and supplement medium with 2.00 g/l trimethylamine-HCl added from a sterile anoxic stock solution (20% w/v).

For [DSM 27785](#) omit formate and acetate and supplement medium with 4.00 ml/l methanol added from a sterile anoxic stock solution.