

## 825a. METHANOBACTERIUM II MEDIUM (N<sub>2</sub>/CO<sub>2</sub>)

NH <sub>4</sub> Cl	1.00	g
K <sub>2</sub> HPO <sub>4</sub>	0.30	g
KH <sub>2</sub> PO <sub>4</sub>	0.30	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	0.20	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.10	g
KCl	0.10	g
NaCl	0.60	g
Trace element solution (see medium 141)	10.00	ml
Na-acetate	0.50	g
Yeast extract	1.00	g
Na-resazurin solution (0.1% w/v)	0.50	ml
NaHCO <sub>3</sub>	4.00	g
Methanol	1.50	ml
Vitamin solution (see medium 141)	10.00	ml
L-Cysteine-HCl x H <sub>2</sub> O	0.50	g
Na <sub>2</sub> S x 9 H <sub>2</sub> O	0.50	g
Distilled water	1000.00	ml

Dissolve ingredients except bicarbonate, methanol, vitamins, cysteine and sulfide. 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 and dissolve bicarbonate, adjust pH to 7.0, then 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 methanol, vitamins (sterilized by filtration), cysteine and sulfide from sterile anoxic stock solutions prepared under 100% N<sub>2</sub> gas. Prior to use check pH of complete medium and adjust to 6.8 - 7.0, if necessary.

For [DSM 10111](#) supplement medium after autoclaving with 3.00 g/l Na-formate added from a sterile anoxic stock solution prepared under 100% N<sub>2</sub> gas.

For [DSM 11106](#) supplement medium after autoclaving with 1.00 g/l Trypticase peptone and 3.00 g/l Na-formate added from sterile anoxic stock solutions prepared under 100% N<sub>2</sub> gas.