

**817: THERMOSPHERA MEDIUM**

MgCl <sub>2</sub> x 6 H <sub>2</sub> O	2.20	g
NaCl	0.90	g
KCl	17.00	mg
NH <sub>4</sub> Cl	12.00	mg
CaCl <sub>2</sub> x 2 H <sub>2</sub> O (0.1% w/v)	7.00	ml
K <sub>2</sub> HPO <sub>4</sub> x 3 H <sub>2</sub> O (0.1% w/v)	7.00	ml
FeCl <sub>3</sub> (0.01% w/v in 0.2 N HCl)	0.50	ml
Yeast extract (BD Bacto)	1.00	g
Peptone (BD Bacto)	1.00	g
Sodium resazurin (0.1% w/v)	0.50	ml
Na <sub>2</sub> CO <sub>3</sub>	0.50	g
<b>Wolin's vitamin solution (10x)</b>	1.00	ml
Na <sub>2</sub> S x 9 H <sub>2</sub> O	0.50	g
Distilled water	1000.00	ml

1. Dissolve ingredients except carbonate, vitamins 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, then dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials to 30% of their volume and autoclave. Add vitamins and sulfide from sterile anoxic stock solutions prepared under 100% N<sub>2</sub> gas and carbonate from a sterile anoxic stock solution prepared under 80% N<sub>2</sub> and 20% CO<sub>2</sub> gas atmosphere. Vitamins should be sterilized by filtration. The pH of the complete medium should be adjusted to 6.5.

2. After inoculation pressurize tubes or bottles (heavy walled) to 2 bar overpressure with sterile 80% N<sub>2</sub> and 20% CO<sub>2</sub> gas mixture.

**Wolin's vitamin solution (10x)** (from medium 120)

Biotin	20.00	mg
Folic acid	20.00	mg
Pyridoxine hydrochloride	100.00	mg
Thiamine HCl	50.00	mg
Riboflavin	50.00	mg
Nicotinic acid	50.00	mg
Calcium D-(+)-pantothenate	50.00	mg
Vitamin B <sub>12</sub>	1.00	mg
p-Aminobenzoic acid	50.00	mg
(DL)-alpha-Lipoic acid	50.00	mg
Distilled water	1000.00	ml