

**1011a. THIOBACTER MJ MEDIUM**

NaCl	3.00	g
K <sub>2</sub> HPO <sub>4</sub>	0.14	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.14	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	0.34	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	0.42	g
KCl	0.33	g
NH <sub>4</sub> Cl	0.25	g
Fe(NH <sub>4</sub> ) <sub>2</sub> (SO <sub>4</sub> ) <sub>2</sub> x 6 H <sub>2</sub> O	0.01	g
Trace element solution (see medium 141)	10.00	ml
NaHCO <sub>3</sub>	1.50	g
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> x 5 H <sub>2</sub> O	1.50	g
Vitamin solution (see medium 141)	10.00	ml
Distilled water	1000.00	ml

Dissolve ingredients (except bicarbonate, thiosulfate and vitamins), 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. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials up to a volume of 20% and autoclave. Add bicarbonate, thiosulfate and vitamins to the autoclaved medium from sterile anoxic stock solutions. Solutions of vitamins and thiosulfate are sterilized by filtration and stored under 100% N<sub>2</sub> gas, whereas the solution of bicarbonate is prepared under 80% N<sub>2</sub> and 20% CO<sub>2</sub> gas mixture and autoclaved. Adjust pH of the complete medium to 6.7. After inoculation add sterile air in an amount that is equivalent to a volume of 50% of the headspace.