

**1104. DETHIOBACTER MEDIUM**

NaCl	6.00	g
K <sub>2</sub> HPO <sub>4</sub>	0.50	g
NaHCO <sub>3</sub>	8.00	g
Na <sub>2</sub> CO <sub>3</sub>	22.00	g
NH <sub>4</sub> Cl	0.20	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	0.20	g
Trace elements solution (see medium 1369)	1.00	ml
Selenite-tungstate solution (see medium 385)	1.00	ml
Yeast extract	0.05	g
Vitamin solution (see medium 141)	10.00	ml
Ethanol	0.60	ml
Na-acetate	0.40	g
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> x 5 H <sub>2</sub> O	2.50	g
Sulfur, powdered	1.50	g
Na <sub>2</sub> S x 9 H <sub>2</sub> O	0.24	g
Distilled water	1000.00	ml

Dissolve sodium chloride and hydrogenphosphate, then sparge solution with 100% N<sub>2</sub> gas for 30 -45 min to make it anoxic. Add and dissolve carbonates, then dispense under 100% N<sub>2</sub> gas atmosphere into anoxic Hungate-type tubes or serum vials containing already the appropriate amount of sulfur. Sterilize medium by heating cultivation vessels in a water bath to 90 - 100°C for 1- 2 hours on each of 3 successive days. After sterilization add ammonium chloride, magnesium chloride, trace elements, yeast extract, vitamins, ethanol, acetate, thiosulfate and sulfide from sterile anoxic stock solutions prepared under 100% N<sub>2</sub> gas. The stock solutions of thiosulfate and vitamins should be sterilized by filtration. Adjust pH of the complete medium to 9.5. After inoculation add sterile 100% H<sub>2</sub> gas to 0.5 bar overpressure.

For DSM 19089 replace ethanol with 1.10 g/l sodium butyrate.