## **Microorganisms**



## 333: THERMITHIOBACILLUS MEDIUM

NH <sub>4</sub> Cl	0.40	g
$MgSO_4 \times 7 H_2O$	0.80	g
Trace element solution	10.00	ml
KH <sub>2</sub> PO <sub>4</sub>	4.00	g
K <sub>2</sub> HPO <sub>4</sub>	4.00	g
$K_2S_4O_6$	3.00	g
Bromocresol purple (saturated aq. solution)	2.00	ml
Agar (BD Bacto), for solid medium	10.00	g
Distilled water	1000.00	ml

Dissolve ingredients except phosphates and tetrathionate. The phosphates are sterilized separately in 1/10 of medium volume and mixed with the other salts when cool. Tetrathionate is sterilized by filtration and added to the autoclaved medium. Adjust pH of complete medium to 6.9. For agar medium autoclave the phosphates (in 100 ml), other salts (in 300 ml), and agar (in 600 ml) separately.

## **Trace element solution** (from medium 333)

Na <sub>2</sub> -EDTA	50.00	g
$ZnSO_4 \times 7 H_2O$	11.00	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	7.34	g
$MnCl_2 \times 4 H_2O$	2.50	g
CoCl <sub>2</sub> x 6 H <sub>2</sub> O	0.50	g
$(NH_4)_6Mo_7O_{24} \times 4 H_2O$	0.50	g
FeSO <sub>4</sub> x 7 H <sub>2</sub> O	5.00	g
$CuSO_4 \times 5 H_2O$	0.20	g
NaOH	11.00	g
Distilled water	1000.00	ml

Dissolve EDTA in distilled water and adjust pH to 7.0 using 2 N NaOH; then add other compounds. Adjust pH of final solution to 6.0 with NaOH.