

## 71: ACIDITHIOBACILLUS THIOOXIDANS MEDIUM

KH <sub>2</sub> PO <sub>4</sub>	3.00	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	0.50	g
(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	3.00	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.25	g
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> x 5 H <sub>2</sub> O	5.00	g
Distilled water	1000.00	ml

1. Prepare the medium without thiosulfate, adjust pH to 4.4 - 4.7 and autoclave at 121°C for 15 min. Sterilize thiosulfate separately by filtration and add after autoclaving.

2. Note: Incubate statically without shaking.

For [DSM 585](#): Replace thiosulfate with 5.00 g/l tetrathionate (K<sub>2</sub>S<sub>4</sub>O<sub>6</sub>) added from a stock solution sterilized by filtration.

For [DSM 14366](#): Supplement medium with 10.00 mg/l FeSO<sub>4</sub> x 7 H<sub>2</sub>O. The final pH of the medium should be 4.4.

For [DSM 103717](#): Omit thiosulfate from the medium and add 10.00 g/l elemental sulfur as substrate. For sterilization place the sulfur in screw-capped tubes, add 1-2 drops of distilled water and incubate on 3 successive days for 3 h at 90-100°C in a water bath. Before use, aseptically layer the sulfur onto the surface of autoclaved liquid basal medium.