71: ACIDITHIOBACILLUS THIOOXIDANS MEDIUM

KH₂PO₄ 3.00 g
MgSO₄ x 7 H₂O 0.50 g
(NH₄)₂SO₄ 3.00 g
CaCl₂ x 2 H₂O 0.25 g
Na₂S₂O₃ x 5 H₂O 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 (K₂S₄O₆) added from a stock solution sterilized by filtration.

For DSM 14366: Supplement medium with 10.00 mg/l FeSO₄ x 7 H₂O. 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.