271. ACIDITHIOBACILLUS (APH) MEDIUM

$(NH_4)_2SO_4$	2.00	g
K_2HPO_4	0.50	g
$MgSO_4$ x 7 H_2O	0.50	g
KCl	0.10	g
$Ca(NO_3)_2$	0.01	g
$FeSO_4$ x 7 H_2O	8.00	g
Distilled water	1000.00	ml

Dissolve ingredients and adjust pH to 2.0 with 10 N H_2SO_4. Sterilize the medium by filtration. Alternatively, autoclave separately the basal medium (pH adjusted to 2.0) and the ferrous sulfate (8.00 g $FeSO_4$ x 7 H_2O in 50 ml distilled water, pH not adjusted, in a sealed vessel under nitrogen gas atmosphere).

For DSM 11478 and DSM 24413 omit the ferrous sulfate 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. Adjust pH of complete medium to 2.0 for DSM 11478 and to 2.5 for DSM 24413.