88: SULFOLOBUS MEDIUM

$(NH_4)_2SO_4$	1.30	g
KH_2PO_4	0.28	g
$MgSO_4$ x 7 H_2O	0.25	g
$CaCl_2$ x 2 H_2O	0.07	g
$FeCl_3$ x 6 H_2O	0.02	g
Allen's trace element solution	10.00	ml
Yeast extract (OXOID)	1.00	g
Distilled water	1000.00	ml

Dissolve ingredients (except yeast extract or other substrates), adjust pH of the salt solution at room temperature to 2.0 using 10 N H_2SO_4 and autoclave. Yeast extract and other organic substrates are sterilized separately by autoclaving of a 10% (w/v) stock solution at neutral pH.

For DSM 5348: Omit yeast extract and supplement medium with 0.50 g/l powdered sulfur and 20.00 g/l sulfide ore (e.g., pyrite). Sterilize sulfur separately by steaming for 3 hours on each of 3 successive days (see medium 35) and ore by heating at 150°C overnight. Add sulfur and ore aseptically to the autoclaved medium.

For DSM 5389, DSM 7519, DSM 12421: Adjust pH of medium to 3.0 - 3.5.

For DSM 6482, DSM 10039, DSM 104736: Reduce the amount of yeast extract to 0.20 g/l and supplement the medium with 5.00 g/l powdered sulfur. Sterilize sulfur separately by steaming for 3 hours on each of 3 successive days (see medium 35) and add aseptically to the autoclaved medium.

For DSM 9789, DSM 9790: Use 2.00 g/l yeast extract and adjust pH of medium to 1.0 by using 300.00 ml 0.5 M H_2SO_4 and 700.00 ml distilled water for the dissolving of salts.

For DSM 16993: Supplement medium with 1.00 g/l D-glucose and 1.00 g/l Casamino acids. Adjust pH of the completed medium to 3.0.

For DSM 18247: Modified, with 0.5% yeast extract; solidified by 0.7% Gelrite; pH:9.0

For DSM 18786: Use only 0.10 g/l yeast extract and supplement medium with 10.00 g/l sulfide ore (e.g., chalcopyrite). Sterilize ore by heating at 150°C overnight. Adjust the pH of the medium to 0.8.

For DSM 29038: Supplement medium with 3.00 g/l $K_2S_4O_6$ added to the autoclaved medium from a stock solution sterilized by filtration. Adjust pH of completed medium to 2.5.

For DSM 29099: Use only 0.20 g/l yeast extract and supplement medium with 1.00 g/l D-glucose and 10.00 g/l powdered sulfur. Sterilize sulfur separately by steaming for 3 hours on each of 3 successive days (see medium 35) and add aseptically to the autoclaved medium. Adjust pH of final medium to 2.5 - 3.0.

For DSM 45263: Adjust pH of medium to 7.5

For DSM 111728: Use only 0.50 g/l yeast extract and supplement medium with 10.00 g/l powdered sulfur. Sterilize sulfur separately by steaming for 3 hours on each of 3 successive days (see medium 35) and add aseptically to the autoclaved medium. Adjust the pH of the final medium to 2.5.

For DSM 112778: Supplement medium with 0.50 g/l powdered sulfur and 20.00 g/l sulfide ore (e.g., pyrite). Sterilize sulfur separately by steaming for 3 hours on each of 3 successive days (see medium 35) and ore by heating at 150°C overnight. Add sulfur and ore aseptically to the autoclaved medium. Adjust the pH of the medium to 3.0.

Allen's trace element solution (from medium 88)

$MnCl_2 \times 4\ H_2O$	180.00	mg
$Na_2B_4O_7 \times 10\ H_2O$	450.00	mg
$ZnSO_4 \times 7\ H_2O$	22.00	mg
$CuCl_2 \times 2\ H_2O$	5.00	mg
$Na_2MoO_4 \times 2\ H_2O$	3.00	mg
$VOSO_4 \times 2\ H_2O$	3.00	mg
$CoSO_4 \times 7\ H_2O$	1.00	mg
Distilled water	1000.00	ml

Adjust pH of final solution to 2 with 1 N HCl.