Microorganisms



390: PYROBACULUM MEDIUM

$(NH_4)_2SO_4$	1.30	g
KH ₂ PO ₄	0.28	g
$MgSO_4 \times 7 H_2O$	0.25	g
CaCl ₂ x 2 H ₂ O	0.07	g
FeCl ₃ x 6 H ₂ O	0.02	g
Allen's trace element solution	10.00	ml
Sodium resazurin (0.1% w/v)	0.50	ml
Trypticase peptone	0.50	g
Yeast extract	0.20	g
$Na_2S_2O_3 \times 5 H_2O$	2.00	g
$Na_2S \times 9 H_2O$	0.50	g
Distilled water	1000.00	ml

Dissolve ingredients (except Trypticase peptone, yeast extract, sodium thiosulfate and sulfide), adjust pH to 6.0 and sparge medium with $100\%~N_2$ gas for at least 30 min to remove dissolved oxygen. After autoclaving add peptone, yeast extract, thiosulfate and sulfide from sterile anoxic stock solutions prepared under $100\%~N_2$ gas. Stock solutions of substrates can be autoclaved with the exception of sodium thiosulfate which should be sterilized by filtration. Prior to inoculation adjust pH of final medium to 6.0.

For <u>DSM 4185</u>: Replace thiosulfate with sulfur. Sulfur is sterilized by steaming for 3 hours on each of 3 succesive days and added aseptically to the sterile medium while retaining anoxic conditions.

For <u>DSM 13380</u>: Omit Trypicase peptone. Increase amount of yeast extract to 1 g/l and lower amount of thiosulfate to 1 g/l. Adjust pH of final medium to 7.0.

For DSM 13514, DSM 103086: Adjust pH of final medium to 6.8.

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 x 2 H ₂ O	5.00	mg
$Na_2MoO_4 \times 2 H_2O$	3.00	mg
VOSO ₄ x 2 H ₂ O	3.00	mg
CoSO ₄ x 7 H ₂ O	1.00	mg
Distilled water	1000.00	ml

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