

196: DESULFOCAPSA SULFEXIGENS MEDIUM

Solution A	961.00	ml
Solution B	30.00	ml
Solution C	10.00	ml

1. First dissolve 2.7 g $\text{FeCl}_3 \times 6 \text{H}_2\text{O}$ in distilled water and adjust the pH to 7.0 with 1 N NaOH (about 3 ml). Add and dissolve remaining salts of solution A and sparge medium with 80% N_2 and 20% CO_2 gas mixture for at least 30 min, then distribute under same gas atmosphere in anoxic Hungate-type tubes or serum vials and autoclave. Solution B is autoclaved separately under 80% N_2 and 20% CO_2 gas atmosphere. Solution C is autoclaved separately under 100% N_2 gas atmosphere. To complete the medium appropriate amounts of solutions B and C are added to the sterile solution A in the sequence as indicated. Final pH of the medium should be adjusted to 7.2.

2. Note: For transfers use 5 - 10% (v/v) inoculum.

Solution A

$\text{FeCl}_3 \times 6 \text{H}_2\text{O}$	2.70	g
Na_2SO_4	3.00	g
KH_2PO_4	0.20	g
NH_4Cl	0.30	g
NaCl	21.00	g
$\text{MgCl}_2 \times 6 \text{H}_2\text{O}$	3.00	g
KCl	0.50	g
$\text{CaCl}_2 \times 2 \text{H}_2\text{O}$	0.15	g
Trace element solution SL-10	1.00	ml
Distilled water	960.00	ml

Solution B

Na_2CO_3	1.50	g
Distilled water	30.00	ml

Solution C

$\text{Na}_2\text{S}_2\text{O}_3 \times 5 \text{H}_2\text{O}$	2.50	g
Distilled water	10.00	ml

Trace element solution SL-10 (from medium 320)

HCl (25%)	10.00	ml
$\text{FeCl}_2 \times 4 \text{H}_2\text{O}$	1.50	g

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ZnCl ₂	70.00	mg
MnCl ₂ x 4 H ₂ O	100.00	mg
H ₃ BO ₃	6.00	mg
CoCl ₂ x 6 H ₂ O	190.00	mg
CuCl ₂ x 2 H ₂ O	2.00	mg
NiCl ₂ x 6 H ₂ O	24.00	mg
Na ₂ MoO ₄ x 2 H ₂ O	36.00	mg
Distilled water	990.00	ml

First dissolve FeCl₂ in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.