

503e. THERMODESULFITIMONAS MEDIUM

Solution A:

KH ₂ PO ₄	0.20	g
NH ₄ Cl	0.25	g
NaCl	1.00	g
MgCl ₂ x 6 H ₂ O	0.40	g
KCl	0.50	g
CaCl ₂ x 2 H ₂ O	0.15	g
Na-resazurin solution (0.1% w/v)	0.50	ml
Distilled water	970.00	ml

Solution B:

Trace element solution SL-10 (see medium 320)	1.00	ml
---	------	----

Solution C:

Vitamins solution (see medium 141)	1.00	ml
------------------------------------	------	----

Solution D:

Selenite-tungstate solution (see medium 385)	1.00	ml
--	------	----

Solution E:

Na ₂ CO ₃	0.50	g
Distilled water	10.00	ml

Solution F:

Na ₂ SO ₃	0.60	g
Distilled water	10.00	ml

Solution G:

Na ₂ S x 9 H ₂ O, 3% w/v solution	0.30	g
Distilled water	10.00	ml

Sparge *solution A* with 80% H₂ and 20% CO₂ gas for 30 – 45 min to make it anoxic, distribute under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. *Solutions B, D* and *G* are autoclaved separately under 100% N₂ gas. *Solutions C* and *F* are prepared under 100% N₂ gas and sterilized by filtration. *Solution E* is autoclaved under 80% N₂ and 20% CO₂ gas atmosphere. To complete the medium appropriate amounts of *solutions B* to *G* are added to the sterile *solution A* in the sequence as indicated. Adjust pH of complete medium to 6.0 - 6.5, if necessary.