

383a. DESULFOTIGNUM MEDIUM

Solution A:

Na ₂ SO ₄	3.00	g
KH ₂ PO ₄	0.20	g
NH ₄ Cl	0.30	g
NaCl	15.00	g
MgCl ₂ x 6 H ₂ O	3.00	g
KCl	0.50	g
CaCl ₂ x 2 H ₂ O	0.15	g
Selenite-tungstate solution (see medium 385)	1.00	ml
Na-resazurin solution (0.1% w/v)	0.50	ml
Distilled water	930.00	ml

Solution B:

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

NaHCO ₃	2.50	g
Distilled water	50.00	ml

Solution D:

Na-pyruvate	1.0	g
Distilled water	50.00	ml

Solution E:

Vitamin solution (see medium 141)	10.00	ml
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Solution F:

Na ₂ S x 9 H ₂ O	0.40	g
Distilled water	10.00	ml

Solution A is sparged with 80% N₂ and 20% CO₂ gas mixture to reach a pH below 6 (at least 30 min), then dispensed under the same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclaved. *Solutions B* and *F* are autoclaved separately under 100% N₂ gas. *Solution C* is autoclaved under 80% N₂ and 20% CO₂ gas atmosphere. *Solutions D* and *E* are prepared under 100% N₂ gas and filter-sterilized. To complete the medium appropriate amounts of *solutions B* to *F* are added to the sterile *solution A* in the sequence as indicated. Final pH of the medium should be 7.0 – 7.2.

Note: Addition of 10 - 20 mg sodium dithionite per liter (e.g. from 5% (w/v) solution freshly prepared under N₂ and filter-sterilized) may stimulate growth of some strains at the beginning. For transfers use 5 - 10% inoculum. Incubate all strains in the dark.