

193. DESULFOBACTER MEDIUM

Solution A:

Na ₂ SO ₄	3.00	g
KH ₂ PO ₄	0.20	g
NH ₄ Cl	0.30	g
NaCl	7.00	g
MgCl ₂ x 6 H ₂ O	1.30	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	920.00	ml

Solution B:

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

NaHCO ₃	4.00	g
Distilled water	50.00	ml

Solution D:

Substrate (see below)

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 distributed under the same gas atmosphere in 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 atmosphere and sterilized by filtration. 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 7.1 - 7.4.

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% (v/v) inoculum.

***Solution D* and additional instructions: see next page!**

DSM 1744, DSM 10631 and DSM 16697:

Na-L-lactate	2.50	g
Distilled water	10.00	ml

Add after autoclaving 1.00 g/l yeast extract from a sterile anoxic stock solution.

DSM 2034:

Na-acetate x 3 H ₂ O	2.50	g
Distilled water	10.00	ml

DSM 2059 and DSM 27197:

Na-benzoate	0.60	g
Distilled water	10.00	ml

DSM 4660:

Phenol	0.10	g
Distilled water	10.00	ml

Add after autoclaving 1.00 ml/l seven vitamins solution (see medium 503) from an anoxic stock solution sterilized by filtration.

DSM 6637:

Acetone	0.58	g
Distilled water	10.00	ml

Supplement medium with 3.40 g/l KNO₃ and omit *solution F*. Add after autoclaving 5.00 g/l Na-pyruvate from an anoxic stock solution sterilized by filtration.

DSM 8775:

Na-pyruvate	2.50	g
Distilled water	10.00	ml

DSM 10711:

Na-pyruvate	2.50	g
Yeast extract	0.50	g
Distilled water	10.00	ml

Add after autoclaving 1.00 ml/l seven vitamins solution (see medium 503) from an anoxic stock solution sterilized by filtration.

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DSM 14956:

Methanol	1.60	g
Distilled water	10.00	ml

DSM 15102:

D-Glucose	3.50	g
Distilled water	10.00	ml

Add after autoclaving 1.00 g/l yeast extract from a sterile anoxic stock solution.

DSM 18843:

Na-stearate	0.62	g
Distilled water	10.00	ml

Add after autoclaving 1.00 ml/l seven vitamins solution (see medium 503) from an anoxic stock solution sterilized by filtration.

DSM 25524:

Na-octanoate	0.33	g
Distilled water	10.00	ml

Add after autoclaving 1.00 ml/l seven vitamins solution (see medium 503) from an anoxic stock solution sterilized by filtration.