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 940.00 ml

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

Solution C:
- Na$_2$CO$_3$ 1.50 g
- Distilled water 30.00 ml

Solution D:
- Substrate (see below)

Solution E:
- Vitamin solution (see medium 141) 10.00 ml

Solution F:
- Na$_2$S x 9 H$_2$O 0.40 g
- Distilled water 10.00 ml

Solution A is sparged with 80% N$_2$ and 20% CO$_2$ 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% N$_2$ gas. Solution C is autoclaved under 80% N$_2$ and 20% CO$_2$ gas atmosphere. Solutions D and E are prepared under 100% N$_2$ 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 N$_2$ 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 H₂O 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.