

195. 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 | 21.00 | g |
| MgCl ₂ x 6 H ₂ O | 3.10 | 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:

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

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|---------------------------------|-------|----|
| Na ₂ CO ₃ | 1.50 | g |
| Distilled water | 30.00 | ml |

Solution D:

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

Solution E:

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

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| 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 mixture into anoxic Hungate-type tubes or serum vials and autoclaved. *Solutions B, D* and *F* are autoclaved separately under 100% N₂ gas. *Solution C* is autoclaved under 80% N₂ and 20% CO₂ gas atmosphere. *Solution E* is 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.

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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.

For DSM 21856 Na-acetate is replaced with 0.90 ml/l 1-butanol added after autoclaving from a sterile anoxic stock solution prepared under 100% N₂ gas.