193b. DESULFOFABA MEDIUM

Solution A:
- Na₂SO₄ 3.00 g
- KH₂PO₄ 0.20 g
- NH₄Cl 0.30 g
- NaCl 7.00 g
- KCl 0.50 g
- MgCl₂ x 6 H₂O 0.60 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

Solution C:
- Na₂CO₃ 1.50 g
- Distilled water 30.00 ml

Solution D:
- Na-propionate 1.50 g
- Distilled water 10.00 ml

Solution E:
- Vitamin solution (see medium 503) 1.00 ml

Solution F:
- CaCl₂ x 2 H₂O 1.50 g
- MgCl₂ x 6 H₂O 11.50 g
- Distilled water 20.00 ml

Solution G:
- Na₂S x 9 H₂O 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, D, F and G 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 G 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 at the beginning. For transfers use 5 - 10% (v/v) inoculum.

For DSM 2075 Na-propionate is replaced by 0.70 g/l Na-butyrate, 0.30 g/l Na-caproate and 0.15 g/l Na-octanoate added after autoclaving from sterile anoxic stock solutions prepared under 100% N₂ gas.