196. DESULFOCAPSA SULFOEXIGENS MEDIUM

Solution A:
- FeCl$_3$ x 6 H$_2$O 2.70 g
- 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
- 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:
- Na$_2$S$_2$O$_3$ x 5 H$_2$O 2.50 g
- Distilled water 10.00 ml

First dissolve 2.7 g FeCl$_3$ x 6 H$_2$O in 890 ml distilled water and adjust the pH to 7.0 with 1 N NaOH (about 3 ml). Add and dissolve remaining salts of solution A and sparge medium with 80% N$_2$ and 20% CO$_2$ gas mixture for at least 30 min, then distribute under same gas atmosphere in anoxic Hungate-type tubes or serum vials and autoclave. Solutions B and D are autoclaved separately under 100% N$_2$ gas atmosphere. Solution C is autoclaved under 80% N$_2$ and 20% CO$_2$ gas atmosphere. To complete the medium appropriate amounts of solutions B to D are added to the sterile solution A in the sequence as indicated. Final pH of the medium should be adjusted to 7.2.

Note: For transfers use 5 - 10% (v/v) inoculum.