1041. DESULFUROMUSA FERRIREDUCTENS MEDIUM

Sea Salts (SIGMA) 35.0 g
Wolfe's mineral elixier (see medium 792) 1.0 ml
Yeast extract 1.0 g
Na-resazurin solution (0.1% w/v) 0.5 ml
NaHCO₃ 2.0 g
Na-acetate 1.6 g
Na₂-fumarate 3.2 g
Vitamin solution (see medium 141) 10.0 ml
Na₂S x 9 H₂O 0.3 g
Distilled water 1000.0 ml

Dissolve ingredients (except bicarbonate, acetate, fumarate, vitamins, and sulfide), then
sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 – 45 min to make it
anoxic. Dispense under same gas atmosphere into anoxic Hungate-type tubes or serum
vials and autoclave. Add acetate, fumarate, vitamins and sulfide from sterile anoxic
stock solutions prepared under 100% N₂ gas and bicarbonate from a sterile anoxic stock
solution prepared under 80% N₂ and 20% CO₂ gas mixture. Stock solutions of vitamins
and fumarate should be sterilized by filtration. Adjust pH of the complete medium to
7.0-7.2, if necessary.