## 1053. SULFURIMONAS PARALVINELLA MEDIUM

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|---|---|---|
| NaCl | 20.00 | g |
| $K_2HPO_4$ | 0.09 | g |
| $KH_2PO_4$ | 0.07 | g |
| $CaCl_2$ | 0.80 | g |
| $NH_4Cl$ | 0.25 | g |
| $NaNO_3$ | 1.00 | g |
| $MgSO_4$ x 7 $H_2O$ | 4.00 | g |
| $MgCl_2$ x 6 $H_2O$ | 3.00 | g |
| KCl | 0.33 | g |
| $Fe_2(SO_4)_3$ x $H_2O$ | 0.01 | g |
| Trace element solution (see medium 141) | 10.00 | ml |
| $Na_2S_2O_3$ x 5 $H_2O$ | 1.00 | g |
| Na-resazurin solution (0.1% w/v) | 0.50 | ml |
| Sulfur, powdered | 10.00 | g |
| $NaHCO_3$ | 1.00 | g |
| Vitamin solution (see medium 141) | 10.00 | ml |
| Distilled water | 1000.00 | ml |

Dissolve ingredients (except sulfur, bicarbonate and vitamins), then sparge medium with 80% $H_2$ and 20% $CO_2$ gas mixture for 30 – 45 min to make it anoxic. Adjust pH to 6.8 with NaOH and dispense under 80% $H_2$ and 20% $CO_2$ gas atmosphere into anoxic Hungate-type tubes or serum vials (up to a volume of 20%) that contain already the appropriate amount of sulfur. Autoclave at a temperature of **110°C** for 20 min. Add vitamins and bicarbonate to the autoclaved medium from sterile anoxic stock solutions. The solution of vitamins is sterilized by filtration and stored under 100% $N_2$ gas, whereas the solution of bicarbonate is prepared under 80% $N_2$ and 20% $CO_2$ gas mixture and autoclaved. Adjust the pH of the complete medium to 6.5. After inoculation pressurize vessels to 2 bar overpressure with sterile 80% $H_2$ and 20% $CO_2$ gas mixture.