

## Main sol. 28 (from medium 28)

<b>Solution A</b>	460.00	ml
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1. Aliquot Solution A into 100 mL screw-cap bottles, filled with 46 mL each. Bubble with N<sub>2</sub>/CO<sub>2</sub> and autoclave at 121°C for 15 min (as described below).

2. Prepare the following solutions (resazurin, bicarbonate and Pfennig's heterotrophic salts) and sterilize as given below.

<b>Resazurin solution</b>	450.00	ml
<b>Bicarbonate solution</b>	50.00	ml
<b>Pfennig's heterotrophic salts solution</b>	26.00	ml

3. Add bicarbonate solution and Pfennig's heterotrophic salts to the resazurin (complete volumina, i.e. 50 mL bicarbonate solution and 26 mL Pfennig's heterotrophic salts solution). Bubble with CO<sub>2</sub> in an ice bath under sterile conditions.

4. Fill 50 ml of this mixture to each bottle of solution A (46 mL + 50 mL).

5. Before use, add 4 ml sulfide solution (1.5%) and 0.1 ml Vitamin B<sub>12</sub> solution to each 100 mL bottle.

<b>Sulfide solution, 1.5%</b>	40.00	ml
<b>Vitamin B<sub>12</sub> solution</b>	1.00	ml

6. Adjust the pH with filter-sterilised 1M Na<sub>2</sub>CO<sub>3</sub> to 7.1-7.3.

7. If needed, aliquot into sterile, N<sub>2</sub> gassed screw-cap tubes under N<sub>2</sub> gas.

8. During the first 24 h, the iron of the medium precipitates in the form of black flocks. No other sediment should arise in the otherwise clear medium.

9. Feed the actively growing culture periodically with neutralized 3% solution of sodium sulfide (use 1 -3 mL/100 mL depending on strain and cultivation stage) to replenish sulfide and with other supplement solutions (see Ref. 3365).

<b>Neutralized sulfide solution 3% (w/v)</b>	10.00	ml
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