

## 194a. DESULFOTOMACULUM OX39 MEDIUM (XYLENE)

### Solution A:

Na <sub>2</sub> SO <sub>4</sub>	1.40	g
KH <sub>2</sub> PO <sub>4</sub>	0.20	g
NH <sub>4</sub> Cl	0.30	g
NaCl	1.00	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	0.40	g
KCl	0.50	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.15	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
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### Solution C:

Na <sub>2</sub> CO <sub>3</sub>	1.50	g
Distilled water	30.00	ml

### Solution D:

m-Xylene	0.30	ml
2,2,4,4,6,8,8-Heptamethylnonane	20.00	ml

### Solution E:

Vitamin solution (see medium 503)	1.00	ml
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### Solution F:

FeSO <sub>4</sub> x 7 H <sub>2</sub> O	0.80	g
0.2 N H <sub>2</sub> SO <sub>4</sub>	10.00	ml

### Solution G:

Na <sub>2</sub> S x 9 H <sub>2</sub> O	0.40	g
Distilled water	10.00	ml

*Solution A* is sparged with 80% N<sub>2</sub> and 20% CO<sub>2</sub> gas mixture to reach a pH below 6 (at least 30 min), then distributed under the same gas atmosphere in anoxic serum vials (e.g., 50 ml medium in 100 ml serum bottles) and autoclaved. *Solutions B, D* and *G* are autoclaved separately under 100% N<sub>2</sub> gas. *Solution C* is autoclaved under 80% N<sub>2</sub> and 20% CO<sub>2</sub> gas atmosphere.

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*Solutions E and F* are prepared under 100% N<sub>2</sub> gas atmosphere and sterilized by filtration. *Solutions B to G* are added to the sterile, cooled *solution A* in appropriate amounts in the sequence as indicated. Final pH of the medium should be 7.2 - 7.4.

*Note: For transfers use 5 - 10% (v/v) inoculum. Incubate tubes in a slanted position.*