

**457. MINERAL MEDIUM (BRUNNER)**

Na <sub>2</sub> HPO <sub>4</sub>	2.44	g
KH <sub>2</sub> PO <sub>4</sub>	1.52	g
(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	0.50	g
MgSO <sub>4</sub> x 7 H <sub>2</sub> O	0.20	g
CaCl <sub>2</sub> x 2 H <sub>2</sub> O	0.05	g
Trace element solution SL-4 (see below)	10.00	ml
Distilled water	1000.00	ml

Adjust pH to 6.9.

Prepare a separate solution of the phosphates and autoclave separately. Combine the two solutions after cooling.

**Rehydrate and cultivate lyophilized cells in complex medium (e.g. medium 1, 220 or 535). After this reactivation, cultivate in mineral medium 457 with the appropriate carbon source.**

*Trace element solution SL-4:*

EDTA	0.50	g
FeSO <sub>4</sub> x 7 H <sub>2</sub> O	0.20	g
Trace element solution SL-6 (see below)	100.00	ml
Distilled water	900.00	ml

*Trace element solution SL-6:*

ZnSO <sub>4</sub> x 7 H <sub>2</sub> O	0.10	g
MnCl <sub>2</sub> x 4 H <sub>2</sub> O	0.03	g
H <sub>3</sub> BO <sub>3</sub>	0.30	g
CoCl <sub>2</sub> x 6 H <sub>2</sub> O	0.20	g
CuCl <sub>2</sub> x 2 H <sub>2</sub> O	0.01	g
NiCl <sub>2</sub> x 6 H <sub>2</sub> O	0.02	g
Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O	0.03	g
Distilled water	1000.00	ml