

508. CARBOXYDOTHERMUS MEDIUM (HETEROTROPH)

KCl	0.33	g
MgCl ₂ x 6 H ₂ O	0.52	g
CaCl ₂ x 2 H ₂ O	0.29	g
NH ₄ Cl	0.33	g
KH ₂ PO ₄	0.33	g
Trace element solution SL-4 (see medium 14)	10.00	ml
Na-resazurin solution (0.1% w/v)	0.50	ml
Na ₂ CO ₃	1.00	g
Na-pyruvate	2.50	g
Yeast extract	0.05	g
Vitamin solution (see medium 141)	9.00	ml
Vitamin solution (see medium 503)	1.00	ml
Na ₂ S x 9 H ₂ O	0.30	g
Distilled water	1000.00	ml

Dissolve ingredients except carbonate, pyruvate, yeast extract, vitamins and sulfide, then sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 -45 min to make it anoxic. Dispense medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add pyruvate, yeast extract, vitamins and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas atmosphere and carbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Stock solutions of pyruvate and vitamins are sterilized by filtration. After completing the medium adjust pH to 6.8-7.0 with a sterile anoxic stock solution of Na₂CO₃ (5% w/v), if necessary.

For [DSM 18923](#) replace pyruvate with 2.00 g/l D-glucose added to the medium from a sterile anoxic stock solution.

For [DSM 22426](#) increase amount of yeast extract to 1.00 g/l.