

298: PELOBACTER PROPIONICUS MEDIUM (FRESHWATER)

KH ₂ PO ₄	0.20	g
NH ₄ Cl	0.25	g
NaCl	1.00	g
MgCl ₂ x 6 H ₂ O	0.40	g
KCl	0.50	g
CaCl ₂ x 2 H ₂ O	0.15	g
Trace element solution SL-10	1.00	ml
Sodium resazurin (0.1% w/v)	0.50	ml
Na ₂ CO ₃	1.50	g
2,3-butanediol	0.90	g
Na ₂ S x 9 H ₂ O	0.36	g
Distilled water	1000.00	ml

1. Dissolve ingredients except carbonate, 2,3-butanediol and sulfide, then sparge medium with 80% N₂ and 20% CO₂ gas mixture for 30 - 45 min to make it anoxic. Dispense medium in anoxic Hungate-type tubes or serum vials under the same gas atmosphere and autoclave. Add 2,3-butanediol and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas and carbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas mixture. Prior to use adjust pH of complete medium to 7.2 - 7.5.

2. Note: Addition of 10 - 20 mg sodium dithionite per liter (e.g. from 5% (w/v) solution freshly prepared under N₂ and filter-sterilized) may stimulate growth of some strains at the beginning.

For [DSM 2395](#): Replace 2,3-butanediol with 1.00 g/l of polyethylene glycol (molecular weight 106 - 20000).

For [DSM 3246](#): Replace 2,3-butanediol with 1.00 g/l acetoin.

For [DSM 6652](#): Replace 2,3-butanediol with 2.60 g/l Na-glutarate and add 20.00 ml/l rumen fluid, clarified (see medium 1310) to the autoclaved medium.

For [DSM 6832](#): Supplement medium with 10.00 ml/l of a Wolin's vitamin solution (see medium 141) and replace 2,3-butanediol by 1.00 g/l of quinic acid added from a neutralized anoxic stock solution.

For [DSM 8385](#): Supplement medium with 1.00 g/l yeast extract and replace 2,3-butanediol by 2.00 g/l D-galactose added from an anoxic stock solution sterilized by filtration.

For [DSM 8909](#): Supplement medium with 1.00 ml/l of seven vitamins solution (see medium 503) and replace 2,3-butanediol by 1.40 g/l triethanolamine hydrochloride added from a 1 M stock solution prepared and autoclaved under 100% N₂ gas).

For [DSM 11264](#): Supplement medium with 0.20 g/l yeast extract and 10.00 ml/l of a Wolin's vitamin solution (see medium 141). Replace 2,3-butanediol by 1.24 g/l ethylene glycol added from a separately sterilized stock solution.

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For [DSM 17541](#): Supplement medium with 10.00 ml/l of a Wolin's vitamin solution (see medium 141) and 1.00 ml/l of selenite-tungstate solution (see medium 385).

For [DSM 29698](#): Replace 2,3-butanediol with 2.20 g/l Na-gluconate.

For [DSM 102354](#): Supplement medium with 1.00 ml/l of seven vitamins solution (see medium 503) and replace 2,3-butanediol by 0.86 g/l crotonic acid added after autoclaving from an anoxic sterile stock solution neutralized with NaOH.

For [DSM 102355](#): Supplement medium with 1.00 ml/l of seven vitamins solution (see medium 503) and replace 2,3-butanediol by 1.25 g/l sodium pyruvate added after autoclaving from an anoxic stock solution sterilized by filtration.

Trace element solution SL-10 (from medium 320)

HCl (25%)	10.00	ml
FeCl ₂ x 4 H ₂ O	1.50	g
ZnCl ₂	70.00	mg
MnCl ₂ x 4 H ₂ O	100.00	mg
H ₃ BO ₃	6.00	mg
CoCl ₂ x 6 H ₂ O	190.00	mg
CuCl ₂ x 2 H ₂ O	2.00	mg
NiCl ₂ x 6 H ₂ O	24.00	mg
Na ₂ MoO ₄ x 2 H ₂ O	36.00	mg
Distilled water	990.00	ml

First dissolve FeCl₂ in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.