

641. DESULFOVIBRIO (MV) MEDIUM

NH ₄ Cl	1.0	g
Na ₂ SO ₄	2.0	g
Na ₂ S ₂ O ₃ x 5 H ₂ O	1.0	g
MgSO ₄ x 7 H ₂ O	1.0	g
CaCl ₂ x 2 H ₂ O	0.1	g
KH ₂ PO ₄	0.5	g
Trace element solution SL-10 (see medium 320)	1.0	ml
Selenite-tungstate solution (see medium 385)	1.0	ml
Yeast extract	1.0	g
Na-resazurin solution (0.1% w/v)	0.5	ml
NaHCO ₃	2.0	g
Vitamin solution (see medium 141)	10.0	ml
Na-DL-lactate	2.5	g
Na ₂ S x 9 H ₂ O	0.1	g
Distilled water	1000.0	ml

Dissolve ingredients (except bicarbonate, vitamins, lactate and sulfide), sparge medium with 100% N₂ gas for 30 – 45 min to make it anoxic, then dispense under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. After autoclaving complete the medium by adding vitamins (sterilized by filtration), lactate and sulfide from sterile anoxic stock solutions prepared under 100% N₂ gas and bicarbonate from a sterile anoxic stock solution prepared under 80% N₂ and 20% CO₂ gas atmosphere. Adjust pH of the complete medium to 7.0 - 7.2, if necessary.

Note: Prior to inoculation 10-20 mg/l sodium dithionite (added from a 5% w/v solution freshly prepared under N₂ and filter-sterilized) can be added to the medium to stimulate growth at the beginning.

For [DSM 7073](#), [DSM 101608](#) and [DSM 101609](#) replace lactate with 0.9 g/l glycerol and adjust pH of complete medium to 7.5.

For [DSM 10349](#) replace lactate with 2.5 g/l Na-pyruvate added to the autoclaved medium from an anoxic stock solution sterilized by filtration and supplement medium with an additional amount of 1.0 g/l Na₂S₂O₃ x 5 H₂O added from an anoxic stock solution sterilized by filtration.

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For [DSM 13257](#), [DSM 16036](#), [DSM 16058](#), [DSM 24088](#), [DSM 24093](#) and [DSM 24523](#) replace lactate with 2.5 g/l Na-pyruvate added to the autoclaved medium from an anoxic stock solution sterilized by filtration.

For [DSM 18151](#) replace lactate with 0.2 g/l Na-acetate. After inoculation pressurize culture vessels to 1 bar overpressure with sterile 80% H₂ and 20% CO₂ gas mixture.

For [DSM 21394](#) replace lactate with 5.0 ml/l methanol added to the autoclaved medium from an anoxic stock solution prepared under 100% N₂ gas.

For [DSM 24089](#) and [DSM 102940](#) replace lactate with 3.5 g/l D-fructose added to the autoclaved medium from an anoxic stock solution sterilized by filtration.

For [DSM 25471](#) replace lactate with 2.0 g/l D-glucose added to the autoclaved medium from a sterile anoxic stock solution.

For [DSM 28127](#) replace lactate with 0.4 g/l Na-benzoate added to the autoclaved medium from a sterile anoxic stock solution.