

640: CALDICELLULOSIRUPTOR MEDIUM

This recipe contains strain-specific modifications for *Thermohydrogenium kirishiense* DSM 11057 *

Final pH: 7.2

Final volume: 1004 ml

NH ₄ Cl	0.90	g
NaCl	0.90	g
MgCl ₂ x 6 H ₂ O	0.40	g
KH ₂ PO ₄	0.75	g
K ₂ HPO ₄	1.50	g
Trypticase peptone (BD BBL)	2.00	g
Yeast extract (OXOID)	1.00	g
Trace element solution SL-10	1.00	ml
FeCl ₃ x 6 H ₂ O (0.1% w/v in 0.2 N HCl)	2.50	ml
Sodium resazurin (0.1% w/v)	0.50	ml
L-Cysteine HCl x H ₂ O	0.75	g
Cellobiose	1.00	g
D-Glucose	5.00	g
Distilled water	1000.00	ml

Dissolve ingredients except cysteine and cellobiose. Sparge medium with 100% N₂ gas for 30 - 45 min to make it anoxic, then add cysteine and adjust pH to 7.2. Distribute medium under same gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Add cellobiose after autoclaving from an anoxic stock solution prepared under 100% N₂ gas atmosphere and sterilized by filtration. Adjust pH of the complete medium to 7.2, if necessary.

* Replace cellobiose with 5.00 g/l D-glucose added to the autoclaved medium from a sterile anoxic stock solution.

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



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First dissolve FeCl_2 in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.