

## 640: CALDICELLULOSIRUPTOR MEDIUM

This recipe contains strain-specific modifications for *Thermoanaerobacterium butyriciformans* DSM 101588 \*

Final pH: 7.2

Final volume: 1004 ml

NH <sub>4</sub> Cl	0.90	g
NaCl	0.90	g
MgCl <sub>2</sub> x 6 H <sub>2</sub> O	0.40	g
KH <sub>2</sub> PO <sub>4</sub>	0.75	g
K <sub>2</sub> HPO <sub>4</sub>	1.50	g
Trypticase peptone (BD BBL)	2.00	g
Yeast extract (OXOID)	1.00	g
<b>Trace element solution SL-10</b>	1.00	ml
FeCl <sub>3</sub> x 6 H <sub>2</sub> 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 <sub>2</sub> O	0.75	g
<del>Cellobiose</del>	<del>1.00</del>	<del>g</del>
D-Glucose	5.00	g
Distilled water	1000.00	ml

Dissolve ingredients except cysteine and cellobiose. Sparge medium with 100% N<sub>2</sub> 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% N<sub>2</sub> 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 <sub>2</sub> x 4 H <sub>2</sub> O	1.50	g
ZnCl <sub>2</sub>	70.00	mg
MnCl <sub>2</sub> x 4 H <sub>2</sub> O	100.00	mg
H <sub>3</sub> BO <sub>3</sub>	6.00	mg
CoCl <sub>2</sub> x 6 H <sub>2</sub> O	190.00	mg
CuCl <sub>2</sub> x 2 H <sub>2</sub> O	2.00	mg
NiCl <sub>2</sub> x 6 H <sub>2</sub> O	24.00	mg
Na <sub>2</sub> MoO <sub>4</sub> x 2 H <sub>2</sub> O	36.00	mg
Distilled water	990.00	ml

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First dissolve  $\text{FeCl}_2$  in the HCl, then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml.