## **Microorganisms**



## 666: SUCCINICLASTICUM MEDIUM

This recipe contains strain-specific modifications for Schwartzia succinivorans DSM 10505 \*

Final pH: 6.7 - 6.8 Final volume: 1000 ml

Clarified rumen fluid	400.00	ml
K <sub>2</sub> HPO <sub>4</sub>	0.23	g
KH <sub>2</sub> PO <sub>4</sub>	0.23	g
NaCl	0.45	g
$(NH_4)_2SO_4$	0.45	g
$CaCl_2 \times 2 H_2O$	0.06	g
$MgSO_4 \times 7 H_2O$	0.09	g
Indigocarmine	5.00	mg
NaHCO <sub>3</sub>	6.40	g
Disodium succinate	5.00	g
Yeast extract	2.00	g
L-Cysteine HCl x H <sub>2</sub> O	0.30	g
$Na_2S \times 9 H_2O$	0.30	g
Distilled water	600.00	ml

- 1. Dissolve ingredients (except bicarbonate, succinate, yeast extract, cysteine and sulfide), bring medium to the boil, then cool to room temperature under 100% CO $_2$  gas atmosphere. Add the bicarbonate and equilibrate the medium with the CO $_2$  gas to pH 6.8. Distribute under 100% CO $_2$  gas atmosphere into anoxic Hungate-type tubes or serum vials and autoclave. Thereafter, add succinate, yeast extract, cysteine and sulfide from sterile anoxic stock solutions prepared under 100% N $_2$  gas atmosphere. Adjust pH of complete medium to 6.7 6.8, if necessary.
- 2. Note: Supplementing the medium with 1.50 g/l agar stimulates growth of strains after resuscitation from ampoules.
- \* Reduce amount of yeast extract to 2.00 g/l.

## Clarified rumen fluid (from medium 1310)

Rumen fluid from cow or sheep (obtained from fistulated animals or abattoir refuse) is filtered through muslin, autoclaved at  $121^{\circ}$ C for 15 min and then centrifuged at 27,000 g for 20 min. The supernatant is made anoxic by sparging with 100% N<sub>2</sub> gas for 15 min, dispensed under same gas atmosphere into anoxic serum vials to 30% of volume and then stored frozen at -20°C.