## 311a: SPOROMUSA MEDIUM (H2/CO2)

| $\mathrm{NH}_{4} \mathrm{Cl}$ | 0.50 | g |
| :--- | ---: | ---: |
| $\mathrm{MgSO}_{4} \times 7 \mathrm{H}_{2} \mathrm{O}$ | 0.50 | g |
| $\mathrm{CaCl}_{2} \times 2 \mathrm{H}_{2} \mathrm{O}$ | 0.25 | g |
| NaCl | 2.25 | g |
| $\mathrm{FeSO}_{4} \times 7 \mathrm{H}_{2} \mathrm{O}\left(0.1 \% \mathrm{w} / \mathrm{v}\right.$ in $\left.0.1 \mathrm{~N} \mathrm{H}_{2} \mathrm{SO}_{4}\right)$ | 2.00 | ml |
| Trace element solution SL-10 | 1.00 | ml |
| Selenite-tungstate solution | 1.00 | ml |
| Yeast extract | 2.00 | g |
| Casitone | 2.00 | g |
| Sodium resazurin (0.1\% w/v) | 0.50 | ml |
| $\mathrm{K}_{2} \mathrm{HPO}_{4}$ | 0.35 | g |
| $\mathrm{KH}_{2} \mathrm{PO}_{4}$ | 0.23 | g |
| $\mathrm{Na}_{2} \mathrm{CO}_{3}$ | 1.00 | g |
| Wolin's vitamin solution (10x) | 1.00 | ml |
| DL-Dithiothreitol | 0.15 | g |
| Distilled water | 1000.00 | ml |

Dissolve ingredients (except phosphates, carbonate, vitamins, and dithiothreitol) and sparge medium with $80 \% \mathrm{H}_{2}$ and $20 \% \mathrm{CO}_{2}$ gas mixture for $30-45$ min to make it anoxic. Dispense under the same gas atmosphere in anoxic Hungate-type tubes or serum vials to $30 \%$ of their volume and autoclave. Add phosphates to the medium after autoclaving from sterile stock solutions prepared under $100 \% \mathrm{~N}_{2}$ gas and carbonate from a sterile stock solution prepared under $80 \% \mathrm{~N}_{2}$ and $20 \% \mathrm{CO}_{2}$ gas mixture. Vitamins and dithiothreitol should be prepared under $\mathrm{N}_{2}$ gas and sterilized by filtration. Adjust the pH of the completed medium to pH 7.0 .

For DSM 11379, DSM 11380, DSM 11381, DSM 11382: Supplement medium with $2.50 \mathrm{~g} / \mathrm{l}$ Na-pyruvate.

Trace element solution SL-10 (from medium 320)

| $\mathrm{HCl}(25 \%)$ | 10.00 | ml |
| :--- | ---: | ---: |
| $\mathrm{FeCl}_{2} \times 4 \mathrm{H}_{2} \mathrm{O}$ | 1.50 | g |
| $\mathrm{ZnCl}_{2}$ | 70.00 | mg |
| $\mathrm{MnCl}_{2} \times 4 \mathrm{H}_{2} \mathrm{O}$ | 100.00 | mg |
| $\mathrm{H}_{3} \mathrm{BO}_{3}$ | 6.00 | mg |
| $\mathrm{CoCl}_{2} \times 6 \mathrm{H}_{2} \mathrm{O}$ | 190.00 | mg |
| $\mathrm{CuCl}_{2} \times 2 \mathrm{H}_{2} \mathrm{O}$ | 2.00 | mg |
| $\mathrm{NiCl}_{2} \times 6 \mathrm{H}_{2} \mathrm{O}$ | 24.00 | mg |
| $\mathrm{Na}_{2} \mathrm{MoO}_{4} \times 2 \mathrm{H}_{2} \mathrm{O}$ | 36.00 | mg |
| Distilled water | 990.00 | ml |

## Microorganisms

DSMZ
311a: SPOROMUSA MEDIUM (H2/CO2)

First dissolve $\mathrm{FeCl}_{2}$ in the HCl , then dilute in water, add and dissolve the other salts. Finally make up to 1000.00 ml .

| Selenite-tungstate solution (from medium 385) |  |  |
| :--- | ---: | ---: |
| NaOH | 0.50 | g |
| $\mathrm{Na}_{2} \mathrm{SeO}_{3} \times 5 \mathrm{H}_{2} \mathrm{O}$ | 3.00 | mg |
| $\mathrm{Na}_{2} \mathrm{WO}_{4} \times 2 \mathrm{H}_{2} \mathrm{O}$ | 4.00 | mg |
| Distilled water | 1000.00 | ml |


| Wolin's vitamin solution (10x) (from medium | 120) |  |
| :--- | ---: | ---: |
| $\quad$ Biotin | 20.00 | mg |
| Folic acid | 20.00 | mg |
| Pyridoxine hydrochloride | 100.00 | mg |
| Thiamine HCl | 50.00 | mg |
| Riboflavin | 50.00 | mg |
| Nicotinic acid | 50.00 | mg |
| Calcium D-(+)-pantothenate | 50.00 | mg |
| Vitamin $\mathrm{B}_{12}$ | 1.00 | mg |
| p-Aminobenzoic acid | 50.00 | mg |
| (DL)-alpha-Lipoic acid | 50.00 | mg |
| Distilled water | 1000.00 | ml |

