

104: PYG MEDIUM (modified)

This recipe contains strain-specific modifications for *Denitrobacterium detoxificans* DSM 21825 *

Final pH: 7.2 Final volume: 1000 ml

Trypticase peptone	5.00	g
Peptone	5.00	g
Yeast extract	10.00	g
Beef extract	5.00	g
Glucose	5.00	g
K ₂ HPO ₄	2.00	g
Tween 80	1.00	ml
Salt solution	40.00	ml
Resazurin	1.00	mg
Vitamin K ₁ solution	0.20	ml
Haemin solution	10.00	ml
L-Cysteine HCl x H_2O	0.50	g
Rumen fluid	10.00	g/l
Volatile fatty acid mixture	10.00	ml
Distilled water	950.00	ml

The vitamin K_1 , haemin solution and the cysteine are added after the medium has been boiled and cooled under CO₂. Adjust pH to 7.2 using 8 N NaOH. Distribute under N₂ and autoclave.

* Plus 1% rumen fluid and volatile fatty acids (see medium 330)

Salt solution (from medium 104)		
CaCl ₂ x 2 H ₂ O	0.25	g
$MgSO_4 \times 7 H_2O$	0.50	g
K ₂ HPO ₄	1.00	g
KH ₂ PO ₄	1.00	g
NaHCO ₃	10.00	g
NaCl	2.00	g
Distilled water	1000.00	ml
Haemin solution (from medium 78)		
Haemin	50.00	mg
NaOH (1 N)	1.00	ml
Distilled water	100.00	ml

Microorganisms

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Dissolve 50 mg haemin in 1 ml 1 N NaOH; make up to 100 ml with distilled water and filter sterilize. Store refrigerated.

Vitamin K ₁ solution (from medium 78)		
Vitamin K ₁	0.10	ml
Ethanol (95 %)	20.00	ml

Dissolve 0.1 ml of vitamin K_1 in 20 ml 95% ethanol and filter sterilize. Store refrigerated in a brown bottle.

Volatile fatty acid mixture* (from medium 330)

Acetic acid	548.50	ml
Propionic acid	193.50	ml
Butyric acid	129.00	ml
n-Valeric acid	32.25	ml
iso-Butyric acid	32.25	ml
DL-2-Methylbutyric acid	32.25	ml
iso-Valeric acid	32.25	ml