

2016-07-14

KC Medium

Kessler & Czygan (1970)

Composition of KC Medium.

	stock solutions (1 L)		volume of stock for 1 L nutrient solution	final concentration
	[mmol/L]	[g/L]	[mL]	[mmol/L]
KNO_3	801	81	10	8
$\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	101	25	10	1
NaCl	804	47	10	8
$\text{NaH}_2\text{PO}_4 \cdot 2\text{H}_2\text{O}$	301	47	10	3
$\text{Na}_2\text{HPO}_4 \cdot 12\text{H}_2\text{O}$	100	36	10	1
$(\text{NH}_4)_6\text{Mo}_7\text{O}_{24} \cdot 4\text{H}_2\text{O}$	0.016	0.02	1	0.000016
$\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$	95.22	14	1	0.095
micronutrient solution ¹			1	
Fe-EDTA solution ²			1	
NP-H ₂ O ³			946	

Adjust pH to 6.5.

¹micronutrient solution stock (1000x, 1 L):

	stock [mmol/L]	stock [g/L]
$\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$	0.7	0.2
H_3BO_3	8.09	0.5
$\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$	2.53	0.5
ddH ₂ O ⁴ , ad 1 L		

²Fe-EDTA solution stock (1000x):

Add 6g of $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ and 8 g of $\text{Na}_2\text{EDTA} \cdot \text{H}_2\text{O}$ (Titrplex[®] III) to 1 L of ddH_2O ⁴. Add one drop of 98% H_2SO_4 .

³NP- H_2O nanopure water, Purelab Pulse (ELGA Lab water, Celle, Germany)

⁴ ddH_2O double distilled water

Reference

Kessler, E. & Czygan, F.C. (1970) Physiologische und biochemische Beiträge zur Taxonomie der Gattung *Chlorella*. Arch. Mikrobiol. **70**, 211-216.