MWC (Modified WC Medium)

Freshwater algae

Stocks	**per 100ml**
(1) $CaCl_2.2H_2O$	3.68 g
(2) $MgSO_4.7H_2O$	3.70 g
(3) $NaHCO_3$	1.26 g
(4) $K_2HPO_4.3H_2O$	1.14 g
(5) $NaNO_3$	8.50 g
(6) $Na_2O_3Si.5H_2O$	2.12 g
(7) Trace elements: (**x10 Concentrate**)	
Na_2EDTA	4.36 g
$FeCl_3.6H_2O$	3.15 g
$CuSO_4.5H_2O$	0.01 g
$ZnSO_4.7H_2O$	0.022 g
$CoCl_2.6H_2O$	0.01 g
$MnCl_2.4H_2O$	0.18 g
$Na_2MoO_4.2H_2O$	0.006 g
H_3BO_3	1.00 g
(8) Vitamin mix:	
	per litre
Cyanocobalamin (Vitamin B_{12})	0.0005 g
Biotin	0.0005 g
Thiamine HCl (Vitamin B_1)	0.1g

For ease of measuring, first prepare primary stock solutions and divide into 1ml aliquots to be frozen for later use.

Component	Primary Stock solution	Quantity	Molar Concentration in final medium
Thiamine HCl (B_1)	-	100mg	2.96×10^{-7}
Biotin	0.1g L^{-1} dH_2O	5ml	2.05×10^{-9}
Cyanocobalamin (B_{12})	0.1g L^{-1} dH_2O	5ml	3.69×10^{-10}

Medium	**per litre**
TES (Dry Buffer)	0.115 g
Stock solutions 1 - 6	1.0 ml each
Stock solution 7 (Trace elements)	0.1 ml
Stock solution 8 (Vitamin mix)	1.0 ml

Make up to 1 litre with deionised water. Autoclave at 15 psi for 15 minutes.

Reference

Wright, R.T. 1964. Dynamics of a phytoplankton community in an ice covered lake. Limnol. Oceanogr. 9: 163-78 – adapted for CCAP

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