

Formulations

MINIMUM ESSENTIAL MEDIUM SPINNER MODIFICATION (MEM-S)

COMPONENTS	Cat.# 112-021 mg / L	Cat.# 112-038 mg / L
Inorganic Salts		
KCl	400.00	400.00
MgSO ₄ (anhydrous)	97.67	97.67
NaCl	6800.00	6800.00
NaHCO ₃	2200.00	2200.00
NaH ₂ PO ₄	1217.40	1217.40
Other Components		
D-Glucose	1000.00	1000.00
Phenol red·Na	10.20	10.20
Penicillin		100 Units/ml
Streptomycin		100 µg/ml
Amino Acids		
L-Arginine·HCl	126.98	126.98
L-Cystine·2HCl	31.29	31.29
L-Glutamine	292.00*	586.00
L-Histidine·HCl·H ₂ O	42.00	42.00
L-Isoleucine	52.00	52.00
L-Leucine	52.00	52.00
L-Lysine·HCl	72.50	72.50
L-Methionine	15.00	15.00
L-Phenylalanine	32.00	32.00
L-Threonine	48.00	48.00
L-Tryptophan	10.00	10.00
L-Tyrosine·2Na·2H ₂ O	51.90	51.90
L-Valine	46.00	46.00
Vitamins		
D-Ca pantothenate	1.00	1.00
Choline chloride	1.00	1.00
Folic acid	1.00	1.00
i-Inositol	2.00	2.00
Nicotinamide	1.00	1.00
Pyridoxal·HCl	1.00	1.00
Riboflavin	0.10	0.10
Thiamine·HCl	1.00	1.00

*Omitted from preparation. Add L-glutamine (Cat.# 118-084-060) to a final concentration of 2mM prior to use.

References: Eagle, H., (1959) Science, **130**:432-437

Morton H.J., (1970) In Vitro, **6**:89-108