

Product Information

MEM Alpha Modification

Product	Volume	Cat. No.
MEM Alpha Modification, w/o L-Glutamine, w/o Nucleosides	500 ml	E0500-310
MEM Alpha Modification, w/o L-Glutamine, with Nucleosides	500 ml	E0500-320

Product Specifications

CO ₂ concentration, optimum	5.0 %
pH	7.0 – 7.5
Osmolality	260 – 340 mOsm/kg
Colour and Appearance	Clear red orange solution
Endotoxin	<1 EU/ml (<0.1 ng/ml)
Cell Culture	Tested
Sterility	Tested
Storage	+2°C to +8°C protected from light, do not freeze!

Formulation

Components	Concentration mg/l	Molecular Weight g/mol	Concentration mM
Amino Acids			
L-Alanine	25.00	89.09	0.28
L-Arginine · HCl	126.00	210.66	0.60
L-Asparagine · H ₂ O	50.00	150.13	0.33
L-Aspartic Acid	30.00	133.10	0.23
L-Cysteine · HCl · H ₂ O	100.00	175.63	0.57
L-Cystine · 2HCl	31.30	313.22	0.10
L-Glutamic Acid	75.00	147.13	0.51
Glycine	50.00	75.07	0.67
L-Histidine · HCl · H ₂ O	42.00	209.63	0.20
L-Isoleucine	52.00	131.17	0.40
L-Leucine	52.00	131.17	0.40
L-Lysine · HCl	72.50	182.65	0.40
L-Methionine	15.00	149.21	0.10
L-Phenylalanine	32.00	165.19	0.19
L-Proline	40.00	115.13	0.35
L-Serine	25.00	105.09	0.24
L-Threonine	48.00	119.12	0.40
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Amino Acids			
L-Tryptophan	10.00	204.23	0.05
L-Tyrosine · 2 Na · H ₂ O	51.90	225.15	0.23
L-Valine	46.00	117.15	0.39
Vitamins			
Ascorbic Acid · Na	50.00	176.12	0.28
D-Biotin	0.10	244.31	0.0004
Choline chloride	1.00	139.62	0.0072
D-Calcium Pantothenate	1.00	476.53	0.0021
Folic Acid	1.00	441.40	0.0023
myo-Inositol	2.00	180.16	0.01
Nicotinamide	1.00	122.12	0.0082
Pyridoxal HCl	1.00	203.62	0.0049
Riboflavin	0.10	376.36	0.0003
Thiamine HCl	1.00	337.27	0.0030
Vitamin B12	1.36	1355.37	0.0010
Inorganic Salts			
CaCl ₂ · 2 H ₂ O	200.00	147.01	1.80
MgSO ₄ (anhydrous)	97.67	120.37	0.81
KCl	400.00	74.55	5.37
NaHCO ₃	2200.00	84.01	26.19
NaCl	6800.00	58.44	116.36
Na ₂ HPO ₄ (anhydrous)	122.00	119.98	1.02

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Components	Concentration mg/l	Molecular Weight g/mol	Concentration mM
Other Components			
Adenosine (<i>not in E0500-310</i>)	10.00		
Cytidine (<i>not in E0500-310</i>)	10.00		
Guanosine (<i>not in E0500-310</i>)	10.00		
Uridine (<i>not in E0500-310</i>)	10.00		
2'-Deoxyadenosine (<i>not in E0500-310</i>)	10.00		
2'-Deoxycytidine · HCl (<i>not in E0500-310</i>)	10.00		
2'-Deoxyguanosine (<i>not in E0500-310</i>)	10.00		
Thymidine (<i>not in E0500-310</i>)	10.00		
D-Glucose	1000.00	180.16	5.55
Lipoic Acid	0.20	206.33	0.001
Phenol Red · Na	11.0	376.36	0.03
Sodium Pyruvate	110.00	110.04	1.00

Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.