

MEM Eagle Cell Culture
Maintenance Medium w/ Earle's
BSS, NEAA, L-Glutamine,
HEPES, Gentamicin, Penicillin,
Streptomycin, Amphotericin-B
& 2% FBS



12-736

Description	CAS #	Chemical Formula	Concentration		Molarity	
			g/L	mg/L	mM	uM
Calcium Chloride Dihydrate	10035-04-8	CaCl ₂ • 2H ₂ O	0.265	265.000	1.802	1.802E+03
Dextrose	50-99-7	C ₆ H ₁₂ O ₆	1.000	1.000E+03	5.551	5.551E+03
Magnesium Sulfate Heptahydrate	10034-99-8	MgSO ₄ • 7H ₂ O	0.200	200.000	0.811	811.458
Potassium Chloride	7447-40-7	KCl	0.400	400.000	5.366	5.366E+03
Sodium Bicarbonate	144-55-8	NaHCO ₃	2.200	2.200E+03	26.187	2.619E+04
Sodium Chloride	7647-14-5	NaCl	5.800	5.800E+03	99.247	9.925E+04
Sodium phosphate monobasic monohydrate	10049-21-5	NaH ₂ PO ₄ • H ₂ O	0.140	140.000	1.015	1.015E+03
L-Alanine	56-41-7	HO ₂ CCH(NH ₂)CH ₃	8.900E-03	8.900	9.990E-02	99.899
L-Arginine Monohydrochloride	1119-34-2	C ₆ H ₁₄ N ₄ O ₂ • HCl	0.126	126.400	0.600	600.019
L-Asparagine	70-47-3	C ₄ H ₈ N ₂ O ₃	1.321E-02	13.210	9.998E-02	99.985
L-Aspartic Acid	56-84-8	HO ₂ CCH(NH ₂)CH ₂ CO ₂ H	1.330E-02	13.300	9.992E-02	99.925
L-Cystine	56-89-3	C ₆ H ₁₂ N ₂ O ₄ S ₂	2.400E-02	24.000	9.988E-02	99.875
L-Glutamic Acid	56-86-0	C ₅ H ₉ NO ₄	1.470E-02	14.700	9.993E-02	99.932
L-Glutamine	56-85-9	C ₅ H ₁₀ N ₂ O ₃	0.292	292.000	1.998	1.998E+03
Glycine	56-40-6	HO ₂ CCH ₂ NH ₂	7.500E-03	7.500	9.991E-02	99.907
L-Histidine Monohydrochloride Monohydrate	5934-29-2	C ₆ H ₉ N ₃ O ₂ • HCl • H ₂ O	4.200E-02	42.000	0.200	200.382
L-Isoleucine	73-32-5	HO ₂ CCH(NH ₂)CH(CH ₃)CH ₂ CH ₃	5.240E-02	52.400	0.399	399.482
L-Leucine	61-90-5	HO ₂ CCH(NH ₂)CH ₂ CH(CH ₃) ₂	5.240E-02	52.400	0.399	399.482
L-Lysine Monohydrochloride	657-27-2	C ₆ H ₁₄ N ₂ O ₂ • HCl	7.300E-02	73.000	0.400	399.672
L-Methionine	63-68-3	HO ₂ CCH(NH ₂)CH ₂ CH ₂ SCH ₃	1.500E-02	15.000	0.101	100.536
L-Phenylalanine	63-91-2	HO ₂ CCH(NH ₂)CH ₂ C ₆ H ₅	3.300E-02	33.000	0.200	199.770
L-Proline	147-85-3	C ₅ H ₉ NO ₂	1.150E-02	11.500	9.989E-02	99.887
L-Serine	56-45-1	HO ₂ CCH(NH ₂)CH ₂ OH	1.050E-02	10.500	9.991E-02	99.914
L-Threonine	72-19-5	HO ₂ CCH(NH ₂)CH(OH)CH ₃	4.760E-02	47.600	0.400	399.597
L-Tryptophan	73-22-3	C ₁₁ H ₁₂ N ₂ O ₂	1.020E-02	10.200	4.994E-02	49.944
L-Tyrosine	60-18-4	C ₉ H ₁₁ NO ₃	3.620E-02	36.200	0.200	199.790
L-Valine	72-18-4	HO ₂ CCH(NH ₂)CH(CH ₃) ₂	4.680E-02	46.800	0.400	399.658
D-Calcium Pantothenate (Vitamin B5)	137-08-6	C ₁₈ H ₃₂ CaN ₂ O ₁₀	1.000E-03	1.000	2.099E-03	2.099
Choline Chloride	67-48-1	HOCH ₂ CH ₂ N(CH ₃) ₃ Cl	1.000E-03	1.000	7.162E-03	7.162
Folic Acid	59-30-3	C ₁₉ H ₁₉ N ₇ O ₆	1.000E-03	1.000	2.266E-03	2.266
l-Inositol	87-89-8	C ₆ H ₁₂ O ₆	2.000E-03	2.000	1.110E-02	11.099
Niacinamide (Nicotinamide)	98-92-0	C ₆ H ₆ N ₂ O	1.000E-03	1.000	8.189E-03	8.189
Pyridoxine Monohydrochloride	58-56-0	C ₈ H ₁₁ NO ₃	1.000E-03	1.000	4.864E-03	4.864
Riboflavin (Vitamin B2)	83-88-5	C ₁₇ H ₂₀ N ₄ O ₆	1.000E-04	0.100	2.657E-04	0.266
Thiamine Monohydrochloride (Vitamin B1)	67-03-8	C ₁₂ H ₁₈ N ₄ OSCl ₂	1.000E-03	1.000	2.965E-03	2.965
Gentamicin Sulfate	1405-41-0	N/A	10 mcg/ml		N/A	
Penicillin G Potassium	N/A	N/A	50 units/ml		N/A	
Streptomycin Sulfate	N/A	N/A	50 mcg/ml		N/A	
HEPES Buffer	7365-45-9	C ₈ H ₁₈ N ₂ O ₄ S	5.960	5.960E+03	25.009	2.501E+04
Phenol Red	34487-61-1	C ₁₉ H ₁₄ O ₅ S	1.000E-02	10.000	2.657E-02	26.567
AO Solubilized Amphotericin B	1397-89-3	C ₄₇ H ₇₃ NO ₁₇	2.5 mcg/ml		N/A	
Heat inactivated FBS	N/A	N/A	2% (v/v)		N/A	