

RPMI-1640 w/
HEPES &
L-Glutamine

12-115



Description	CAS #	Chemical Formula	Concentration		Molarity	
			g/L	mg/L	mM	uM
Sodium Bicarbonate	144-55-8	NaHCO ₃	2.000	2.000E+03	23.807	2.381E+04
L-Glutamine	56-85-9	C ₅ H ₁₀ N ₂ O ₃	0.300	300.000	2.053	2.053E+03
HEPES Buffer	7365-45-9	C ₈ H ₁₈ N ₂ O ₄ S	5.957	5.957E+03	24.999	2.500E+04
D-Glucose anhydrous	50-99-7	C ₆ H ₁₂ O ₆	2.000	2.000E+03	11.101	1.110E+04
Sodium Chloride	7647-14-5	NaCl	5.000	5.000E+03	85.558	8.556E+04
Potassium Chloride	7447-40-7	KCl	0.400	400.000	5.366	5.366E+03
Ca(NO ₃) ₂ ·4H ₂ O	13477-34-4	Ca(NO ₃) ₂ , 4H ₂ O	0.100	100.000	0.423	423.460
MgSO ₄ anhydrous	7487-88-9	MgSO ₄	4.883E-02	48.830	0.406	405.666
Glutathione reduced	70-18-8	C ₁₀ H ₁₇ N ₃ O ₆ S	1.000E-03	1.000	3.254E-03	3.254
L-Arginine.HCl	1119-34-2	C ₆ H ₁₄ N ₄ O ₂ · HCl	0.242	241.860	1.148	1.148E+03
L-Asparagine.H ₂ O	5794-13-8	NH ₂ COCH ₂ CH(NH ₂)COOH · H ₂ O	5.681E-02	56.810	0.378	378.405
L-Aspartic Acid	56-84-8	HO ₂ CCH(NH ₂)CH ₂ CO ₂ H	2.000E-02	20.000	0.150	150.263
Glycine	56-40-6	HO ₂ CCH ₂ NH ₂	1.000E-02	10.000	0.133	133.209
L-Glutamic Acid	56-86-0	C ₅ H ₉ NO ₄	2.000E-02	20.000	0.136	135.962
L-Histidine.HCl.H ₂ O	5934-29-2	C ₆ H ₉ N ₃ O ₂ · HCl · H ₂ O	2.027E-02	20.270	9.671E-02	96.708
L-Hydroxyproline	51-35-4	C ₅ H ₉ NO ₃	2.000E-02	20.000	0.153	152.520
L-Isoleucine	73-32-5	HO ₂ CCH(NH ₂)CH(CH ₃)CH ₂ CH ₃	5.000E-02	50.000	0.381	381.185
L-Leucine	61-90-5	HO ₂ CCH(NH ₂)CH ₂ CH(CH ₃) ₂	5.000E-02	50.000	0.381	381.185
L-Lysine.HCl	657-27-2	C ₆ H ₁₄ N ₂ O ₂ · HCl	4.000E-02	40.000	0.219	218.998
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	1.500E-02	15.000	9.080E-02	90.805
L-Serine	56-45-1	HO ₂ CCH(NH ₂)CH ₂ OH	3.000E-02	30.000	0.285	285.470
L-Threonine	72-19-5	HO ₂ CCH(NH ₂)CH(OH)CH ₃	2.000E-02	20.000	0.168	167.898
L-Tryptophane	73-22-3	C ₁₁ H ₁₂ N ₂ O ₂	5.000E-03	5.000	2.448E-02	24.482
L-Valine	72-18-4	HO ₂ CCH(NH ₂)CH(CH ₃) ₂	2.000E-02	20.000	0.171	170.794
L-Proline	147-85-3	C ₅ H ₉ NO ₂	2.000E-02	20.000	0.174	173.717
D-Calcium Pantothenate	137-08-6	C ₁₈ H ₃₂ CaN ₂ O ₁₀	2.500E-04	0.250	5.246E-04	0.525
Folic Acid	59-30-3	C ₁₉ H ₁₉ N ₇ O ₆	1.000E-03	1.000	2.266E-03	2.266
Myo-Inositol	87-89-8	C ₆ H ₁₂ O ₆	3.500E-02	35.000	0.194	194.229
Nicotinamide	98-92-0	C ₆ H ₆ N ₂ O	1.000E-03	1.000	8.189E-03	8.189
Pyridoxine HCl	58-56-0	C ₈ H ₁₁ NO ₃	1.000E-03	1.000	4.864E-03	4.864
Riboflavine	83-88-5	C ₁₇ H ₂₀ N ₄ O ₆	2.000E-04	0.200	5.314E-04	0.531
Thiamine.HCl	67-03-8	C ₁₂ H ₁₈ N ₄ O ₄ S	1.000E-03	1.000	2.965E-03	2.965
P-Aminobenzoic Acid	150-13-0	C ₇ H ₇ NO ₂	1.000E-03	1.000	7.294E-03	7.294
D-Biotin (Vitamin H)	58-85-5	C ₁₀ H ₁₆ N ₂ O ₃ S	2.000E-04	0.200	8.186E-04	0.819
Vitamin B12	83-88-5	C ₁₇ H ₂₀ N ₄ O ₆	5.000E-06	5.000E-03	1.329E-05	0.013
Choline Chloride	67-48-1	HOCH ₂ CH ₂ N(CH ₃) ₃ Cl	3.000E-03	3.000	2.149E-02	21.485
Phenol Red Salt Sodium	34487-61-1	C ₁₉ H ₁₄ O ₅ S	5.100E-03	5.100	1.355E-02	13.549
L-Tyrosine.2Na.2H ₂ O	122666-78-9	C ₉ H ₉ NO ₃ Na ₂ · 2H ₂ O	2.883E-02	28.830	0.110	110.379
L-Cystine.2HCl	30925-07-6	C ₆ H ₁₂ N ₂ O ₄ S ₂ · 2HCl	6.519E-02	65.190	0.208	208.142
Na ₂ HPO ₄ anhydrous	7558-79-4	Na ₂ HPO ₄	0.800	800.490	5.637	5.637E+03