

RPMI-1640 w/  
L-Glutamine, HEPES,  
100 U/mL Penicillin &  
50µg/mL Streptomycin

09-774

Lonza

Description	CAS #	Chemical Formula	Concentration		Molarity	
			g/L	mg/L	mM	uM
Ca(NO3)2.4H2O	13477-34-4	Ca(NO3)2, 4H2O	0.100	100.000	0.423	423.460
Dextrose	50-99-7	C6H12O6	2.000	2.000E+03	11.101	1.110E+04
Magnesium Sulfate Anhydrous	7487-88-9	MgSO4	4.883E-02	48.830	0.406	405.666
Potassium Chloride	7447-40-7	KCl	0.400	400.000	5.366	5.366E+03
Sodium Bicarbonate	144-55-8	NaHCO3	2.000	2.000E+03	23.807	2.381E+04
Sodium Chloride	7647-14-5	NaCl	5.000	5.000E+03	85.558	8.556E+04
Sodium Phosphate, Dibasic Anhydrous	7558-79-4	Na2HPO4	0.800	800.490	5.637	5.637E+03
L-Arginine Monohydrochloride	1119-34-2	C6H14N4O2 • HCl	0.242	241.860	1.148	1.148E+03
L-Asparagine Monohydrate	5794-13-8	NH2COCH2CH(NH2)COOH • H2O	5.681E-02	56.810	0.378	378.405
L-Aspartic Acid	56-84-8	HO2CCH(NH2)CH2CO2H	2.000E-02	20.000	0.150	150.263
L-Glutamic Acid	56-86-0	C5H9NO4	2.000E-02	20.000	0.136	135.962
L-Glutamine	56-85-9	C5H10N2O3	0.300	300.000	2.053	2.053E+03
Glutathione Reduced	70-18-8	C10H17N3O6S	1.000E-03	1.000	3.254E-03	3.254
Glycine	56-40-6	HO2CCH2NH2	1.000E-02	10.000	0.133	133.209
L-Histidine Monohydrochloride Monohydrate	5934-29-2	C6H9N3O2 • HCl • H2O	2.027E-02	20.270	9.671E-02	96.708
L-Hydroxyproline	51-35-4	C5H9NO3	2.000E-02	20.000	0.153	152.520
L-Isoleucine	73-32-5	HO2CCH(NH2)CH(CH3)CH2CH3	5.000E-02	50.000	0.381	381.185
L-Leucine	61-90-5	HO2CCH(NH2)CH2CH(CH3)2	5.000E-02	50.000	0.381	381.185
L-Lysine Monohydrochloride	657-27-2	C6H14N2O2 • HCl	4.000E-02	40.000	0.219	218.998
L-Methionine	63-68-3	HO2CCH(NH2)CH2CH2SCH3	1.500E-02	15.000	0.101	100.536
L-Phenylalanine	63-91-2	HO2CCH(NH2)CH2C6H5	1.500E-02	15.000	9.080E-02	90.805
L-Proline	147-85-3	C5H9NO2	2.000E-02	20.000	0.174	173.717
L-Serine	56-45-1	HO2CCH(NH2)CH2OH	3.000E-02	30.000	0.285	285.470
L-Threonine	72-19-5	HO2CCH(NH2)CH(OH)CH3	2.000E-02	20.000	0.168	167.898
L-Tryptophan	73-22-3	C11H12N2O2	5.000E-03	5.000	2.448E-02	24.482
L-Valine	72-18-4	HO2CCH(NH2)CH(CH3)2	2.000E-02	20.000	0.171	170.794
D-Biotin (Vitamin H)	58-85-5	C10H16N2O3S	2.000E-04	0.200	8.186E-04	0.819
D-Calcium Pantothenate (Vitamin B5)	137-08-6	C18H32CaN2O10	2.500E-04	0.250	5.246E-04	0.525
Choline Chloride	67-48-1	HOCH2CH2N(CH3)3Cl	3.000E-03	3.000	2.149E-02	21.485
Folic Acid	59-30-3	C19H19N7O6	1.000E-03	1.000	2.266E-03	2.266
I-Inositol	87-89-8	C6H12O6	3.500E-02	35.000	0.194	194.229
Niacinamide (Nicotinamide)	98-92-0	C6H6N2O	1.000E-03	1.000	8.189E-03	8.189
Pyridoxine Monohydrochloride	58-56-0	C8H11NO3	1.000E-03	1.000	4.864E-03	4.864
Riboflavin (Vitamin B2)	83-88-5	C17H20N4O6	2.000E-04	0.200	5.314E-04	0.531
Thiamine Monohydrochloride (Vitamin B1)	67-03-8	C12H18N4OSCl2	1.000E-03	1.000	2.965E-03	2.965
Cyanocobalamin (Vitamin B12)	68-19-9	C63H88CoN14O14P	5.000E-06	5.000E-03	3.689E-06	0.004
Penicillin G Potassium @ 100 U/mL	N/A	N/A	100 U/ml		NA	
Streptomycin Sulfate @ 50 mcg/mL	N/A	N/A	50 mcg/ml		NA	
HEPES Buffer	7365-45-9	C8H18N2O4S	5.958	5.958E+03	25.001	2.500E+04
Phenol Red	34487-61-1	C19H14O5S	5.100E-03	5.100	1.355E-02	13.549
P-Aminobenzoic Acid	150-13-0	C7H7NO2	1.000E-03	1.000	7.292E-03	7.292
L-Tyrosine Disodium Salt, Dihydrate	122666-78-9	C9H9NO3Na2 • 2H2O	2.883E-02	28.830	0.110	110.379
L-Cystine Dihydrochloride	30925-07-6	C6H12N2O4S2•2HCl	6.519E-02	65.190	0.208	208.142