

DMEM 4.5 g/L Glucose
w/ HEPES,
w/o L-Glutamine

12-709

Lonza

Description	CAS #	Chemical Formula	Concentration		Molarity	
			g/L	mg/L	mM	uM
Calcium Chloride Anhydrous	10043-52-4	CaCl ₂	0.200	200.000	1.802	1.802E+03
Dextrose	50-99-7	C ₆ H ₁₂ O ₆	4.500	4.500E+03	24.978	2.498E+04
Ferric Nitrate Nonahydrate	7782-61-8	Fe(NO ₃) ₃ • 9H ₂ O	1.000E-04	0.100	2.475E-04	0.248
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	3.700	3.700E+03	44.042	4.404E+04
Sodium Chloride	7647-14-5	NaCl	5.400	5.400E+03	92.402	9.240E+04
Sodium phosphate monobasic monohydrate	10049-21-5	NaH ₂ PO ₄ • H ₂ O	0.125	125.000	0.906	905.863
L-Arginine Monohydrochloride	1119-34-2	C ₆ H ₁₄ N ₄ O ₂ • HCl	0.084	84.000	0.399	398.747
Glycine	56-40-6	HO ₂ CCH ₂ NH ₂	0.030	30.000	0.400	399.627
L-Histidine Monohydrochloride Monohydrate	5934-29-2	C ₆ H ₉ N ₃ O ₂ • HCl • H ₂ O	0.042	42.000	0.200	200.382
L-Isoleucine	73-32-5	HO ₂ CCH(NH ₂)CH(CH ₃)CH ₂ CH ₃	0.105	104.800	0.799	798.963
L-Leucine	61-90-5	HO ₂ CCH(NH ₂)CH ₂ CH(CH ₃) ₂	0.105	104.800	0.799	798.963
L-Lysine Monohydrochloride	657-27-2	C ₆ H ₁₄ N ₂ O ₂ • HCl	0.146	146.200	0.800	800.438
L-Methionine	63-68-3	HO ₂ CCH(NH ₂)CH ₂ CH ₂ SCH ₃	0.030	30.000	0.201	201.072
L-Phenylalanine	63-91-2	HO ₂ CCH(NH ₂)CH ₂ C ₆ H ₅	0.066	66.000	0.400	399.540
L-Serine	56-45-1	HO ₂ CCH(NH ₂)CH ₂ OH	0.042	42.000	0.400	399.657
L-Threonine	72-19-5	HO ₂ CCH(NH ₂)CH(OH)CH ₃	0.095	95.200	0.799	799.194
L-Tryptophan	73-22-3	C ₁₁ H ₁₂ N ₂ O ₂	0.016	16.000	0.078	78.343
L-Valine	72-18-4	HO ₂ CCH(NH ₂)CH(CH ₃) ₂	0.094	93.600	0.799	799.317
D-Calcium Pantothenate (Vitamin B5)	137-08-6	C ₁₈ H ₃₂ CaN ₂ O ₁₀	4.000E-03	4.000	8.394E-03	8.394
Choline Chloride	67-48-1	HOCH ₂ CH ₂ N(CH ₃) ₃ Cl	4.000E-03	4.000	0.029	28.647
Folic Acid	59-30-3	C ₁₉ H ₁₉ N ₇ O ₆	4.000E-03	4.000	9.062E-03	9.062
I-Inositol	87-89-8	C ₆ H ₁₂ O ₆	7.000E-03	7.000	0.039	38.846
Niacinamide (Nicotinamide)	98-92-0	C ₆ H ₆ N ₂ O	4.000E-03	4.000	0.033	32.757
Pyridoxine Monohydrochloride	58-56-0	C ₈ H ₁₁ NO ₃	4.000E-03	4.000	0.019	19.455
Riboflavin (Vitamin B2)	83-88-5	C ₁₇ H ₂₀ N ₄ O ₆	4.000E-04	0.400	1.063E-03	1.063
Thiamine Monohydrochloride (Vitamin B1)	67-03-8	C ₁₂ H ₁₈ N ₄ O ₄ S	4.000E-03	4.000	0.012	11.859
HEPES Buffer	7365-45-9	C ₈ H ₁₈ N ₂ O ₄ S	5.958	5.958E+03	24.999	2.500E+04
Phenol Red	34487-61-1	C ₁₉ H ₁₄ O ₅ S	0.015	15.000	0.040	39.851
Pyruvic Acid Sodium Salt	113-24-6	CH ₃ COCO ₂ Na	0.110	110.000	1.000	999.636
L-Tyrosine Disodium Salt, Dihydrate	122666-78-9	C ₉ H ₉ NO ₃ Na ₂ • 2H ₂ O	0.104	103.790	0.397	397.373
L-Cystine Dihydrochloride	30925-07-6	C ₆ H ₁₂ N ₂ O ₄ S ₂ •2HCl	0.063	62.562	0.200	199.750