

Experimental Media, Component List

Component	MW g/mol	Ames mg/L	Ames mM	L-15 mg/L	L-15 mM	BME mg/L	BME mM	Locke's mg/L	Locke's mM
Salts						BME 100X			
CaCl2 • 2H2O	147.01	169	1.15						
CaCl2	111			140	1.26				1.2
Magnesium Chloride	95			93.7	0.99				2.4
MgSO4 (anhyd)	120.37	148.8	1.24	97.67	0.81				
KCl	74.55	231	3.1	400	5.37				3.6
KH2PO4	136.09	68	0.5	60	0.44				
NaCl	58.44	7010	119.95	8000	136.89	8500	145.45	6,574.5	113.95
Na2HPO4	142			190	1.34				
Amino acids						BME 50X			
L-Alanine	89	2.4	2.7E-02	225	2.53				
L-Arginine • HCl	174	4.21	2.42E-02	500	2.87				
L-Asparagine	132	0.84	6.36E-03	250	1.89				
L-Asparagine HCl	168.58					1050	6.23		0.12
L-Aspartic acid	175.14	0.12	6.85E-04						
L-Cystine • 2HCl	157.46	0.07	4.13E-04						
L-Cystine	121			120	0.99	600	4.96		0.1
L-Glutamic acid • Na	187.13	1.18	6.32E-03						
L-Glutamine	146	73	0.5	300	2.05				
L-analyt Glutamine	217								
Glycine	75	0.45	6E-03	200	2.67				
L-Histidine	155			250	1.61	400	2.58		0.05
L-Histidine • HCl • monohydrate	209.46	2.51	1.2E-02						
L-Isoleucine	131	0.58	4.43E-03	250	1.91	1300	9.92		0.2
L-Leucine	131	1.44	1.1E-02	125	0.95	1300	9.92		0.2
L-Lysine • HCl	182.46	3.65	2E-02			1849	10.13		0.2
L-Lysine	146			75	0.51				
L-Methionine	149	0.39	2.62E-03	75	0.5	375	2.52		0.05
L-Phenylalanine	165	1.32	8E-03	125	0.76	825	5		0.1
L-Proline	115.13	0.07	6.08E-04						
L-Serine	105	2.52	2.4E-02	200	1.9				
L-Taurine	125.15	0.75	5.99E-03						
L-Threonine	119	3.33	2.8E-02	300	2.52	1200	10.08		0.2
L-Tryptophan	204	0.49	2.4E-03	20	0.1	200	0.98		1.96E-02
L-Tyrosine • 2Na • dihydrate	240	2.11	8.79E-03						
L-Tyrosine	181			300	1.66	900	4.97		0.1
L-Valine	117	1.76	1.5E-02	100	0.85	1175	10.04		0.2
Vitamins						BME 100X			
Ascorbic acid • Na	215.12	17.96	0.08						
D-Biotin	244.31	0.1	4.09E-04			100	0.41		4.09E-03
Choline chloride	140	0.7	5E-03	1	7.14E-03	100	0.71		7.14E-03
Folic acid	441	0.1	2.27E-04	1	2.27E-03	100	0.23		2.27E-03
myo-Inositol	180	27.2	0.15	2	1.11E-02	200	1.11		1.11E-02
Niacinamide	122	0.1	8.2E-04	1	8.2E-03	100	0.82		8.2E-03
D-Pantothenic acid • ½Ca	477	0.1	2.1E-04	1	2.1E-03	100	0.21		2.1E-03
Pyridoxal • HCl	283.6	0.1	3.53E-04			100	0.35		3.53E-03
Riboflavin	376.36	1E-02	2.66E-05			10	0.027		2.66E-04
Riboflavin 5'-phosphate Na	478			0.1	2.09E-04				
Thiamine • HCl	337.3	0.1	2.96E-04						
Thiamine monophosphate	442			1	2.26E-03				
Sugars									
D-Glucose	180.16	1081	6	1,801.6	10			1,801.6	10
D-Galactose	180	1081	6.01	900	5				
Other									
Cytidine	323.2	0.73	2.26E-03						
Hypoxanthine	245.80	0.82	3.34E-05						
Pyruvic acid • Na	110.04	13.33	0.12						
Thymidine	242.23	0.24	9.91E-04						
Uridine	244.2	0.73	2.99E-03						
Sodium Pyruvate	110	0.73	6.64E-03	550	5				
Sodium Gluconate									
Add									
NaHCO3	84.01	1900	22.62					1,680.2	20
HEPES	238.3								10
EDTA	372.24								2E-02
Na2succinate	141.09							423.27	3
BSA	66382							100	1.51E-03

Product Sheet		http://www.google.com/url?sa=t&source=web&cd=5&ved=0C4QFjAE&url=http%3A%2F%2Fwww.sigmaaldrich.com%2Fetc%2Fmedialib%2Fdocs%2FSigma%2FProduct%2FProduct%2FInformation%2FSheet%2F1%2Fa1420pis.Par.0001.File.tmp%2Fa1420pis.pdf&ei=eoRITN3yEY_OswPWkv3jDQ&usg=AFQjCNHUrVwzeRLi0UhcAEM6sctdCIGOPQ&sig2=6VOH70kPSvpY3jbVWkGlg		http://www.invitrogen.com/site/us/en/home/support/Product-Technical-Resources/media_formulation.81.html		http://www.sigmaaldrich.com/etc/medialib/docs/Sigma/Formulation/b6891for.Par.0001.File.tmp/b6891for.pdf			
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