

Minimum Essential Medium Eagle (MEM)

Component	M0268	M0275	M0518	M0643	M0644	M0769	M0894	M1018
	[Powder] g/L	[Liquid] g/L	[Powder] g/L	[Powder] g/L	[Powder] g/L	[Powder] g/L	[Powder] g/L	[Powder] g/L
Inorganic salts								
CaCl ₂ • 2H ₂ O	0.265	2.65	—	0.265	0.265	0.265	0.265	0.185
MgCl ₂ • 6H ₂ O	—	—	0.2	—	—	—	—	—
MgSO ₄ (anhyd)	0.09767	0.9767	—	0.09767	0.09767	0.09767	0.09767	0.09767
KCl	0.4	4	0.4 0.4 0.4 0.4 0.4 0.4	—	—	—	—	—
KH ₂ PO ₄	—	—	—	—	—	—	—	0.06
NaCl	6.8	68	6.5	6.8	6.8	6.8	6.8	8
Na ₂ HPO ₄ (anhyd)	—	—	—	—	—	—	—	0.04788
NaH ₂ PO ₄ (anhyd)	0.122	1.22	1.154	0.122	0.122	0.122	0.122	—
Amino acids								
L-Alanine	—	—	—	0.0089	0.025	—	0.025	0.0089
L-Arginine • HCl	0.126	1.26	0.126	0.126	0.126	0.126	0.126	0.126
L-Asparagine monohydrate	—	—	—	0.015	0.05	—	0.05	0.015
L-Aspartic acid	—	—	—	0.0133	0.03	—	0.03	0.0133
L-Cysteine • HCl • monohydrate	—	—	—	—	0.1	—	0.1	—
L-Cystine • 2HCl	0.0313	0.313	0.0324	0.0313	0.0313	0.0313	0.0313	0.0313
L-Glutamic acid	—	—	—	0.0147	0.075	—	0.075	0.0147
L-Glutamine	0.292	—	0.292	0.292	0.292	—	0.292	0.292
Glycine	—	—	—	0.0075	0.05	—	0.05	0.0075
L-Histidine • HCl • monohydrate	0.042	0.42	0.042	0.042	0.042	0.042	0.042	0.042
L-Isoleucine	0.052	0.52	0.052	0.052	0.052	0.052	0.052	0.052
L-Leucine	0.052	0.52	0.052	0.052	0.052	0.052	0.052	0.052
L-Lysine • HCl	0.0725	0.725	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725
L-Methionine	0.015	0.15	0.015	0.015	0.015	0.015	0.015	0.015
L-Phenylalanine	0.032	0.32	0.032	0.032	0.032	0.032	0.032	0.032
L-Proline	—	—	—	0.0115	0.04	—	0.04	0.0115
L-Serine	—	—	—	0.0105	0.025	—	0.025	0.0105
L-Threonine	0.048	0.48	0.048	0.048	0.048	0.048	0.048	0.048
L-Tryptophan	0.01	0.1	0.01	0.01	0.01	0.01	0.01	0.01
L-Tyrosine • 2Na • dihydrate	0.0519	0.519	0.05452	0.0519	0.0519	0.036	0.0519	0.0519
L-Valine	0.046	0.46	0.046	0.046	0.046	0.046	0.046	0.046
Vitamins								
L-Ascorbic acid • Na	—	—	—	—	0.05	—	0.05	—
D-Biotin	—	—	—	—	0.0001	—	0.0001	—
Choline bitartrate	—	—	—	—	—	0.0018	—	—
Choline chloride	0.001	0.01	0.001	0.001	0.001	—	0.001	0.001
Folic acid	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
myo-Inositol	0.002	0.02	0.002	0.002	0.002	0.002	0.002	0.002
Niacinamide	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
D-Pantothenic acid • ½Ca	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
Pyridoxal • HCl	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
Riboflavin	0.0001	0.001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Thiamine • HCl	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
Thioctic acid	—	—	—	—	0.0002	—	0.0002	—
Vitamin B12	—	—	—	—	0.00136	—	0.00136	—
Sugars								
Glucose	1	10	2	1	1	1	1	1
Other								
Adenosine	—	—	—	—	0.01	—	—	—
Cytidine	—	—	—	—	0.01	—	—	—
2'-Deoxyadenosine	—	—	—	—	0.01	—	—	—
2'-Deoxycytidine • HCl	—	—	—	—	0.011	—	—	—
2'-Deoxyguanosine	—	—	—	—	0.01	—	—	—
Guanosine	—	—	—	—	0.01	—	—	—
Phenol red • Na	0.011	0.11	0.011	0.011	0.011	0.0064	0.011	0.011
Pyruvic acid	—	—	—	—	0.11	—	0.11	—
Succinic acid	—	—	—	—	—	0.075	—	—
Succinic acid • Na • hexahydrate	—	—	—	—	—	0.1	—	—
Thymidine	—	—	—	—	0.01	—	—	—
Uridine	—	—	—	—	0.01	—	—	—
Add								
L-Glutamine	—	0.292 at 1X	—	—	—	0.292	—	—
NaHCO ₃	2.2	2.2 at 1X	2	2.2	2.2	2.2	2.2	0.35

Minimum Essential Medium Eagle (MEM)

Component	M2279	M2289	M2414	M2645	M3024	M3786	M3911
	[Liquid] g/L	[Liquid] g/L	[Liquid] g/L	[Powder] g/L	[Powder] g/L	[Liquid] g/L	[Liquid] g/L
Inorganic salts							
CaCl ₂ • 2H ₂ O	0.265	0.265	0.265	0.265	0.265	0.265	0.265
MgSO ₄ (anhyd)	0.09767	0.09767	0.09767	0.09767	0.09767	0.09767	0.09767
KCl	0.4	0.4	0.4	0.4	0.4	0.4	0.4
KH ₂ PO ₄ (anhyd)	—	—	—	—	—	—	—
NaHCO ₃	2.2	2.2	0.85	—	—	2.2	2.2
NaCl	6.8	6.8	6.8	5.5	6.8	6.8	6.8
Na ₂ HPO ₄ (anhyd)	—	—	—	—	—	—	—
NaH ₂ PO ₄ (anhyd)	0.122	0.122	0.122	0.122	0.122	—	0.122
Amino acids							
L-Alanine	—	—	—	—	0.0089	—	—
L-Arginine • HCl	0.126	0.126	0.126	0.126	0.126	0.126	0.126
L-Asparagine monohydrate	—	—	—	—	0.015	—	—
L-Aspartic acid	—	—	—	—	0.0133	—	—
L-Cystine • 2HCl	0.0313	—	0.0313	0.0313	0.0313	—	0.0313
L-Glutamic acid	—	—	—	—	0.0147	—	—
L-Glutamine	—	—	—	0.292	—	—	0.292
Glycine	—	—	—	—	0.0075	—	—
L-Histidine • HCl • monohydrate	0.042	0.042	0.042	0.042	0.042	0.042	0.042
L-Isoleucine	0.052	0.052	0.052	0.052	0.052	0.052	0.052
L-Leucine	0.052	0.052	0.052	0.052	0.052	0.052	0.052
L-Lysine • HCl	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725
L-Methionine	0.015	—	0.015	0.015	0.015	0.015	—
L-Phenylalanine	0.032	0.032	0.032	0.032	0.032	0.032	0.032
L-Proline	—	—	—	—	0.0115	—	—
L-Serine	—	—	—	—	0.0105	—	—
L-Threonine	0.048	0.048	0.048	0.048	0.048	0.048	0.048
L-Tryptophan	0.01	0.01	0.01	0.01	0.01	0.01	0.01
L-Tyrosine • 2Na • dihydrate	0.0519	0.0519	0.0519	0.0519	0.0519	0.0519	0.0519
L-Valine	0.046	0.046	0.046	0.046	0.046	0.046	0.046
Vitamins							
Choline chloride	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Folic acid	0.001	0.001	0.001	0.001	0.001	0.001	0.001
myo-Inositol	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Niacinamide	0.001	0.001	0.001	0.001	0.001	0.001	0.001
D-Pantothenic acid • ½Ca	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Pyridoxal • HCl	0.001	0.001	—	0.001	0.001	0.001	0.001
Riboflavin	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Thiamine • HCl	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Sugars							
Glucose	1	1	1	1	1	1	1
Other							
HEPES	—	—	—	5.958	—	—	—
Phenol red • Na	0.011	0.011	0.11	0.011	—	0.011	0.011
Add							
L-Cystine • 2HCl	—	0.313	—	—	—	—	—
L-Glutamine	0.292	0.292	0.292	—	0.292	0.292	—
L-Methionine	—	0.015	—	—	—	—	0.015
Na ₂ HPO ₄ (anhyd)	—	—	—	—	—	0.122	—
NaHCO ₃	—	—	—	2.2	2.2	—	—

Minimum Essential Medium Eagle (MEM)

Component	M4526	M4642	M4655	M4780	M5185	M5650
	[Liquid] g/L	[Powder] g/L	[Liquid] g/L	[Liquid] g/L	[Liquid] g/L	[Liquid] g/L
Inorganic salts						
CaCl ₂ • 2H ₂ O	0.265	0.185	0.265	0.185	0.265	0.265
MgSO ₄ (anhyd)	0.09767	0.09767	0.09767	0.09767	0.09767	0.09767
KCl	0.4	0.4	0.4	0.4	0.4	0.4
KH ₂ PO ₄	—	0.06	—	0.06	—	—
NaHCO ₃	2.2	—	2.2	0.35	2.2	2.2
NaCl	6.8	8	6.8	8	6.8	6.8
Na ₂ HPO ₄ (anhyd)	—	0.04788	—	0.04788	0.122	—
NaH ₂ PO ₄ (anhyd)	0.122	—	0.122	—	—	0.122
Amino acids						
L-Alanine	0.025	—	—	—	0.025	0.0089
L-Arginine • HCl	0.126	0.126	0.126	0.126	0.126	0.126
L-Asparagine monohydrate	0.05	—	—	—	0.05	0.015
L-Aspartic acid	0.03	—	—	—	0.03	0.0133
L-Cysteine • HCl • monohydrate	0.1	—	—	—	0.1	—
L-Cystine • 2HCl	0.0313	0.0313	0.0313	0.0313	0.0313	0.0313
L-Glutamic acid	0.075	—	—	—	0.075	0.0147
L-Glutamine	—	0.292	0.292	0.292	0.292	—
Glycine	0.05	—	—	—	0.05	0.0075
L-Histidine • HCl • monohydrate	0.042	0.042	0.042	0.042	0.042	0.042
L-Isoleucine	0.052	0.052	0.052	0.052	0.052	0.052
L-Leucine	0.052	0.052	0.052	0.052	0.052	0.052
L-Lysine • HCl	0.0725	0.0725	0.0725	0.0725	0.0725	0.0725
L-Methionine	0.015	0.015	0.015	0.015	0.015	0.015
L-Phenylalanine	0.032	0.032	0.032	0.032	0.032	0.032
L-Proline	0.04	—	—	—	0.04	0.0115
L-Serine	0.025	—	—	—	0.025	0.0105
L-Threonine	0.048	0.048	0.048	0.048	0.048	0.048
L-Tryptophan	0.01	0.01	0.01	0.01	0.01	0.01
L-Tyrosine • 2Na • dihydrate	0.0519	0.0519	0.0519	0.0519	0.0519	0.0519
L-Valine	0.046	0.046	0.046	0.046	0.046	0.046
Vitamins						
L-Ascorbic acid • Na	0.05	—	—	—	0.05	—
D-Biotin	0.0001	—	—	—	0.0001	—
Choline chloride	0.001	0.001	0.001	0.001	0.001	0.001
Folic acid	0.001	0.001	0.001	0.001	0.001	0.001
myo-Inositol	0.002	0.002	0.002	0.002	0.002	0.002
Lipoic acid	0.0002	—	—	—	—	—
Niacinamide	0.001	0.001	0.001	0.001	0.001	0.001
D-Panthenic acid • ½Ca	0.001	0.001	0.001	0.001	0.001	0.001
Pyridoxal • HCl	0.001	0.001	0.001	0.001	0.001	0.001
Riboflavin	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Thiamine • HCl	0.001	0.001	0.001	0.001	0.001	0.001
Thioctic acid	—	—	—	—	0.0002	—
Vitamin B12	0.00136	—	—	—	0.00136	—
Sugars						
Glucose	1	1	1	1	1	1
Other						
Adenosine	—	—	—	—	—	—
Cytidine	—	—	—	—	—	—
2'-Deoxyadenosine	—	—	—	—	—	—
2'-Deoxycytidine •HCl	—	—	—	—	—	—
2'-Deoxyguanosine	—	—	—	—	—	—
Guanosine	—	—	—	—	—	—
Phenol red • Na	0.011	0.011	0.011	0.011	0.011	0.011
Pyruvic acid	0.11	—	—	—	0.11	—
Thymidine	—	—	—	—	—	—
Uridine	—	—	—	—	—	—
Add						
L-Glutamine	0.292	—	—	—	—	0.292
NaHCO ₃	—	0.35	—	—	—	—

