

DMEM/F12 Medium Ingredient Formula Table 1

Ingredient(mg/L) / Cat. No.	PM150312	PM150312A	PM150310	PM150310A	PM150311	PM150313	PM150316
Inorganic Salt							
CaCl ₂ (Anhydrous)	116.6	116.6	116.6	116.6	116.6	116.6	116.6
CuSO ₄ •5H ₂ O	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Fe(NO ₃) ₃ •9H ₂ O	0.05	0.05	0.05	0.05	0.05	0.05	0.05
FeSO ₄ •7H ₂ O	0.417	0.417	0.417	0.417	0.417	0.417	0.417
MgCl ₂ (Anhydrous)	28.64	28.64	28.64	28.64	28.64	28.64	28.64
MgSO ₄ (Anhydrous)	48.84	48.84	48.84	48.84	48.84	48.84	48.84
KCl	311.8	311.8	311.8	311.8	311.8	311.8	311.8
NaHCO ₃	2438	2438	1200	1200	1200	2438	2438
NaCl	6995.5	6995.5	6995.5	6995.5	6995.5	6995.5	6995.5
Na ₂ HPO ₄ (Anhydrous)	71.02	71.02	71.02	71.02	71.02	71.02	71.02
NaH ₂ PO ₄ (Anhydrous)	54.3	54.3	54.3	54.3	54.3	54.3	54.3
ZnSO ₄ •7H ₂ O	0.432	0.432	0.432	0.432	0.432	0.432	0.432
Amino Acid							
Glycine	18.75	18.75	18.75	18.75	18.75	18.75	18.75
L-Alanine	4.45	4.45	4.45	4.45	4.45	4.45	4.45
L-Arginine Hydrochloride	147.5	147.5	147.5	147.5	147.5	147.5	147.5
L-Asparagine Monohydrate	7.5	7.5	7.5	7.5	7.5	7.5	7.5
L-Aspartic Acid	6.65	6.65	6.65	6.65	6.65	6.65	6.65
L-Cysteine Hydrochloride	17.56	17.56	17.56	17.56	17.56	17.56	17.56
L-Cystine Dihydrochloride	31.29	31.29	31.29	31.29	31.29	31.29	31.29
L-Glutamic Acid	7.35	7.35	7.35	7.35	7.35	7.35	7.35
L-Glutamine	365	365	365	365	–	–	365
L-Histidine Hydrochloride	31.48	31.48	31.48	31.48	31.48	31.48	31.48
L-Isoleucine	54.47	54.47	54.47	54.47	54.47	54.47	54.47
L-Leucine	59.05	59.05	59.05	59.05	59.05	59.05	59.05
L-Lysine Hydrochloride	91.25	91.25	91.25	91.25	91.25	91.25	91.25
L-Methionine	17.24	17.24	17.24	17.24	17.24	17.24	17.24
L-Phenylalanine	35.48	35.48	35.48	35.48	35.48	35.48	35.48
L-Proline	17.25	17.25	17.25	17.25	17.25	17.25	17.25
L-Serine	26.25	26.25	26.25	26.25	26.25	26.25	26.25
L-Threonine	53.45	53.45	53.45	53.45	53.45	53.45	53.45
L-Tryptophan	9.02	9.02	9.02	9.02	9.02	9.02	9.02
L-Tyrosine Disodium Salt	55.79	55.79	55.79	55.79	55.79	55.79	55.79
L-Valine	52.85	52.85	52.85	52.85	52.85	52.85	52.85
Vitamin							
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride	8.98	8.98	8.98	8.98	8.98	8.98	8.98
D-Calcium Pantothenate	2.24	2.24	2.24	2.24	2.24	2.24	2.24
Folic Acid	2.65	2.65	2.65	2.65	2.65	2.65	2.65
Niacinamide	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Pyridoxine Hydrochloride	2	2	2	2	2	2	2
Riboflavin	0.219	0.219	0.219	0.219	0.219	0.219	0.219
Thiamine Hydrochlorid	2.17	2.17	2.17	2.17	2.17	2.17	2.17
Vitamin B12	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Meso-inositol	12.6	12.6	12.6	12.6	12.6	12.6	12.6
Others							
D-Glucose	3151	3151	3151	3151	3151	3151	3151
HEPES	–	–	3574.5	3574.5	3574.5	–	–
Hypoxanthine Sodium Salt	2.39	2.39	2.39	2.39	2.39	2.39	2.39
Linoleic Acid	0.042	0.042	0.042	0.042	0.042	0.042	0.042
Lipoic Acid	0.105	0.105	0.105	0.105	0.105	0.105	0.105
Phenol Red	8.1	8.1	8.1	8.1	8.1	8.1	–
Putrescine Dihydrochloride	0.081	0.081	0.081	0.081	0.081	0.081	0.081
Sodium Pyruvate	55	55	55	55	55	55	55
Thymidine	0.365	0.365	0.365	0.365	0.365	0.365	0.365
Penicillin G Sodium Salt	–	100kU	–	100kU	–	–	–
Streptomycin Sulfate	–	100	–	100	–	–	–

DMEM/F12 Ingredient Formula_Table 2

Ingredient(mg/L) / Cat.	PM150314	PM150315	PM150317	PM150318	PM150319	PM150320	PM150321
Inorganic Salt							
CaCl ₂ (Anhydrous)	116.6	116.6	116.6	116.6	116.6	116.6	116.6
CuSO ₄ •5H ₂ O	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Fe(NO ₃) ₃ •9H ₂ O	0.05	0.05	0.05	0.05	0.05	0.05	0.05
FeSO ₄ •7H ₂ O	0.417	0.417	0.417	0.417	0.417	0.417	0.417
MgCl ₂ (Anhydrous)	28.64	28.64	28.64	28.64	28.64	28.64	28.64
MgSO ₄ (Anhydrous)	48.84	48.84	48.84	48.84	48.84	48.84	48.84
KCl	311.8	311.8	311.8	311.8	311.8	311.8	311.8
NaHCO ₃	2438	1200	2438	1200	1200	2438	1200
NaCl	6995.5	6995.5	6995.5	6995.5	6995.5	6995.5	6995.5
Na ₂ HPO ₄ (Anhydrous)	71.02	71.02	71.02	71.02	71.02	71.02	71.02
NaH ₂ PO ₄ (Anhydrous)	54.3	54.3	54.3	54.3	54.3	54.3	54.3
ZnSO ₄ •7H ₂ O	0.432	0.432	0.432	0.432	0.432	0.432	0.432
Amino Acid							
L-Alanyl-L-Glutamine	543	543	–	–	–	543	543
Glycine	18.75	18.75	18.75	18.75	18.75	18.75	18.75
L-Alanine	4.45	4.45	4.45	4.45	4.45	4.45	4.45
L-Arginine Hydrochloride	147.5	147.5	147.5	147.5	147.5	147.5	147.5
L-Asparagine Monohydrate	7.5	7.5	7.5	7.5	7.5	7.5	7.5
L-Aspartic Acid	6.65	6.65	6.65	6.65	6.65	6.65	6.65
L-Cysteine Hydrochloride	17.56	17.56	17.56	17.56	17.56	17.56	17.56
L-Cystine Dihydrochloride	31.29	31.29	31.29	31.29	31.29	31.29	31.29
L-Glutamic Acid	7.35	7.35	7.35	7.35	7.35	7.35	7.35
L-Glutamine	–	–	–	365	–	–	–
L-Histidine Hydrochloride	31.48	31.48	31.48	31.48	31.48	31.48	31.48
L-Isoleucine	54.47	54.47	54.47	54.47	54.47	54.47	54.47
L-Leucine	59.05	59.05	59.05	59.05	59.05	59.05	59.05
L-Lysine Hydrochloride	91.25	91.25	91.25	91.25	91.25	91.25	91.25
L-Methionine	17.24	17.24	17.24	17.24	17.24	17.24	17.24
L-Phenylalanine	35.48	35.48	35.48	35.48	35.48	35.48	35.48
L-Proline	17.25	17.25	17.25	17.25	17.25	17.25	17.25
L-Serine	26.25	26.25	26.25	26.25	26.25	26.25	26.25
L-Threonine	53.45	53.45	53.45	53.45	53.45	53.45	53.45
L-Tryptophan	9.02	9.02	9.02	9.02	9.02	9.02	9.02
L-Tyrosine Disodium Salt	55.79	55.79	55.79	55.79	55.79	55.79	55.79
L-Valine	52.85	52.85	52.85	52.85	52.85	52.85	52.85
Vitamin							
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride	8.98	8.98	8.98	8.98	8.98	8.98	8.98
D-Calcium Pantothenate	2.24	2.24	2.24	2.24	2.24	2.24	2.24
Folic Acid	2.65	2.65	2.65	2.65	2.65	2.65	2.65
Niacinamide	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Pyridoxine Hydrochloride	2	2	2	2	2	2	2
Riboflavin	0.219	0.219	0.219	0.219	0.219	0.219	0.219
Thiamine Hydrochlorid	2.17	2.17	2.17	2.17	2.17	2.17	2.17
Vitamin B12	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Meso-inositol	12.6	12.6	12.6	12.6	12.6	12.6	12.6
Others							
D-Glucose	3151	3151	3151	3151	3151	3151	3151
HEPES	–	3574.5	3574.5	3574.5	3574.5	–	3574.5
Hypoxanthine Sodium Salt	2.39	2.39	2.39	2.39	2.39	2.39	2.39
Linoleic Acid	0.042	0.042	0.042	0.042	0.042	0.042	0.042
Lipoic Acid	0.105	0.105	0.105	0.105	0.105	0.105	0.105
Phenol Red	8.1	8.1	–	–	–	–	–
Putrescine Dihydrochloride	0.081	0.081	0.081	0.081	0.081	0.081	0.081
Sodium Pyruvate	55	55	55	55	55	55	55
Thymidine	0.365	0.365	0.365	0.365	0.365	0.365	0.365

DMEM/F12 Ingredient Formula_Table 3

Ingredient(mg/L) / Cat.	PM150322	PM150323	PM150324	PM150325	PM150326	PM150327	PM150328
Inorganic Salt							
CaCl ₂ (Anhydrous)	116.6	116.6	116.6	116.6	116.6	116.6	116.6
CuSO ₄ •5H ₂ O	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Fe(NO ₃) ₃ •9H ₂ O	0.05	0.05	0.05	0.05	0.05	0.05	0.05
FeSO ₄ •7H ₂ O	0.417	0.417	0.417	0.417	0.417	0.417	0.417
MgCl ₂ (Anhydrous)	28.64	28.64	28.64	28.64	28.64	28.64	28.64
MgSO ₄ (Anhydrous)	48.84	48.84	48.84	48.84	48.84	48.84	48.84
KCl	311.8	311.8	311.8	311.8	311.8	311.8	311.8
NaHCO ₃	2438	1200	2438	1200	2438	1200	2438
NaCl	6995.5	6995.5	6995.5	6995.5	6995.5	6995.5	6995.5
Na ₂ HPO ₄ (Anhydrous)	71.02	71.02	71.02	71.02	71.02	71.02	71.02
NaH ₂ PO ₄ (Anhydrous)	54.3	54.3	54.3	54.3	54.3	54.3	54.3
ZnSO ₄ •7H ₂ O	0.432	0.432	0.432	0.432	0.432	0.432	0.432
Amino Acid							
L-Alanyl-L-Glutamine	–	–	–	–	–	–	–
Glycine	18.75	18.75	18.75	18.75	18.75	18.75	18.75
L-Alanine	4.45	4.45	4.45	4.45	4.45	4.45	4.45
L-Arginine Hydrochloride	147.5	147.5	147.5	147.5	147.5	147.5	147.5
L-Asparagine Monohydrate	7.5	7.5	7.5	7.5	7.5	7.5	7.5
L-Aspartic Acid	6.65	6.65	6.65	6.65	6.65	6.65	6.65
L-Cysteine Hydrochloride	17.56	17.56	17.56	17.56	17.56	17.56	17.56
L-Cystine Dihydrochloride	31.29	31.29	31.29	31.29	31.29	31.29	31.29
L-Glutamic Acid	7.35	7.35	7.35	7.35	7.35	7.35	7.35
L-Glutamine	365	365	365	365	–	–	–
L-Histidine Hydrochloride	31.48	31.48	31.48	31.48	31.48	31.48	31.48
L-Isoleucine	54.47	54.47	54.47	54.47	54.47	54.47	54.47
L-Leucine	59.05	59.05	59.05	59.05	59.05	59.05	59.05
L-Lysine Hydrochloride	91.25	91.25	91.25	91.25	91.25	91.25	91.25
L-Methionine	17.24	17.24	17.24	17.24	17.24	17.24	17.24
L-Phenylalanine	35.48	35.48	35.48	35.48	35.48	35.48	35.48
L-Proline	17.25	17.25	17.25	17.25	17.25	17.25	17.25
L-Serine	26.25	26.25	26.25	26.25	26.25	26.25	26.25
L-Threonine	53.45	53.45	53.45	53.45	53.45	53.45	53.45
L-Tryptophan	9.02	9.02	9.02	9.02	9.02	9.02	9.02
L-Tyrosine Disodium Salt	55.79	55.79	55.79	55.79	55.79	55.79	55.79
L-Valine	52.85	52.85	52.85	52.85	52.85	52.85	52.85
Vitamin							
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride	8.98	8.98	8.98	8.98	8.98	8.98	8.98
D-Calcium Pantothenate	2.24	2.24	2.24	2.24	2.24	2.24	2.24
Folic Acid	2.65	2.65	2.65	2.65	2.65	2.65	2.65
Niacinamide	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Pyridoxine Hydrochloride	2	2	2	2	2	2	2
Riboflavin	0.219	0.219	0.219	0.219	0.219	0.219	0.219
Thiamine Hydrochlorid	2.17	2.17	2.17	2.17	2.17	2.17	2.17
Vitamin B12	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Meso-inositol	12.6	12.6	12.6	12.6	12.6	12.6	12.6
Others							
D-Glucose	–	–	–	–	–	–	–
HEPES	–	3574.5	–	3574.5	–	3574.5	–
Hypoxanthine Sodium Salt	2.39	2.39	2.39	2.39	2.39	2.39	2.39
Linoleic Acid	0.042	0.042	0.042	0.042	0.042	0.042	0.042
Lipoic Acid	0.105	0.105	0.105	0.105	0.105	0.105	0.105
Phenol Red	8.1	8.1	–	–	8.1	8.1	–
Putrescine Dihydrochloride	0.081	0.081	0.081	0.081	0.081	0.081	0.081
Sodium Pyruvate	55	55	55	55	55	55	55
Thymidine	0.365	0.365	0.365	0.365	0.365	0.365	0.365

DMEM/F12 Ingredient Formula_Table 4

Ingredient(mg/L) / Cat.	PM150329	PM150330	PM150331	PM1503332	PM150333
Inorganic Salt					
CaCl ₂ (Anhydrous)	116.6	116.6	116.6	116.6	116.6
CuSO ₄ •5H ₂ O	0.0013	0.0013	0.0013	0.0013	0.0013
Fe(NO ₃) ₃ •9H ₂ O	0.05	0.05	0.05	0.05	0.05
FeSO ₄ •7H ₂ O	0.417	0.417	0.417	0.417	0.417
MgCl ₂ (Anhydrous)	28.64	28.64	28.64	28.64	28.64
MgSO ₄ (Anhydrous)	48.84	48.84	48.84	48.84	48.84
KCl	311.8	311.8	311.8	311.8	311.8
NaHCO ₃	1200	2438	1200	2438	1200
NaCl	6995.5	6995.5	6995.5	6995.5	6995.5
Na ₂ HPO ₄ (Anhydrous)	71.02	71.02	71.02	71.02	71.02
NaH ₂ PO ₄ (Anhydrous)	54.3	54.3	54.3	54.3	54.3
ZnSO ₄ •7H ₂ O	0.432	0.432	0.432	0.432	0.432
Amino Acid					
L-Alanyl-L-Glutamine	–	543	543	543	543
Glycine	18.75	18.75	18.75	18.75	18.75
L-Alanine	4.45	4.45	4.45	4.45	4.45
L-Arginine Hydrochloride	147.5	147.5	147.5	147.5	147.5
L-Asparagine	7.5	7.5	7.5	7.5	7.5
L-Aspartic Acid	6.65	6.65	6.65	6.65	6.65
L-Cysteine Hydrochloride	17.56	17.56	17.56	17.56	17.56
L-Cystine Dihydrochloride	31.29	31.29	31.29	31.29	31.29
L-Glutamic Acid	7.35	7.35	7.35	7.35	7.35
L-Glutamine	–	–	–	–	–
L-Histidine Hydrochloride	31.48	31.48	31.48	31.48	31.48
L-Isoleucine	54.47	54.47	54.47	54.47	54.47
L-Leucine	59.05	59.05	59.05	59.05	59.05
L-Lysine Hydrochloride	91.25	91.25	91.25	91.25	91.25
L-Methionine	17.24	17.24	17.24	17.24	17.24
L-Phenylalanine	35.48	35.48	35.48	35.48	35.48
L-Proline	17.25	17.25	17.25	17.25	17.25
L-Serine	26.25	26.25	26.25	26.25	26.25
L-Threonine	53.45	53.45	53.45	53.45	53.45
L-Tryptophan	9.02	9.02	9.02	9.02	9.02
L-Tyrosine Disodium Salt	55.79	55.79	55.79	55.79	55.79
L-Valine	52.85	52.85	52.85	52.85	52.85
Vitamin					
Biotin	0.0035	0.0035	0.0035	0.0035	0.0035
Choline Chloride	8.98	8.98	8.98	8.98	8.98
D-Calcium Pantothenate	2.24	2.24	2.24	2.24	2.24
Folic Acid	2.65	2.65	2.65	2.65	2.65
Niacinamide	2.02	2.02	2.02	2.02	2.02
Pyridoxine Hydrochloride	2	2	2	2	2
Riboflavin	0.219	0.219	0.219	0.219	0.219
Thiamine Hydrochlorid	2.17	2.17	2.17	2.17	2.17
Vitamin B12	0.68	0.68	0.68	0.68	0.68
Meso-inositol	12.6	12.6	12.6	12.6	12.6
Others					
D-Glucose	–	–	–	–	–
HEPES	3574.5	–	3574.5	–	3574.5
Hypoxanthine Sodium	2.39	2.39	2.39	2.39	2.39
Linoleic Acid	0.042	0.042	0.042	0.042	0.042
Lipoic Acid	0.105	0.105	0.105	0.105	0.105
Phenol Red	–	8.1	8.1	–	–
Putrescine	0.081	0.081	0.081	0.081	0.081
Sodium Pyruvate	55	55	55	55	55
Thymidine	0.365	0.365	0.365	0.365	0.365