

### Hams\_F-12K Medium Ingredient Formula

Ingredient(mg/L) / Cat. No.	PM150910	PM150910A	PM150911	PM150912	PM150913	PM150914	PM150915
<b>Inorganic Salt</b>							
CaCl <sub>2</sub> (Anhydrous)	102	102	102	102	102	102	102
CuSO <sub>4</sub> •5H <sub>2</sub> O	0.002	0.002	0.002	0.002	0.002	0.002	0.002
FeSO <sub>4</sub> •7H <sub>2</sub> O	0.8	0.8	0.8	0.8	0.8	0.8	0.8
MgCl <sub>2</sub> (Anhydrous)	49.7	49.7	49.7	49.7	49.7	49.7	49.7
MgSO <sub>4</sub> (Anhydrous)	192	192	192	192	192	192	192
KCl	285	285	285	285	285	285	285
NaHCO <sub>3</sub>	2500	2500	2500	2500	2500	2500	2500
NaCl	7530	7530	7530	7530	7530	7530	7530
Na <sub>2</sub> HPO <sub>4</sub> (Anhydrous)	115.5	115.5	115.5	115.5	115.5	115.5	115.5
NaH <sub>2</sub> PO <sub>4</sub> (Anhydrous)	59	59	59	59	59	59	59
ZnSO <sub>4</sub> •7H <sub>2</sub> O	0.144	0.144	0.144	0.144	0.144	0.144	0.144
<b>Amino Acid</b>							
L-Alanyl-L-Glutamine	–	–	–	434	–	–	–
Glycine	15	15	15	15	15	15	15
L-Alanine	18	18	18	18	18	18	18
L-Arginine Hydrochloride	422	422	422	422	422	422	422
L-Asparagine-H <sub>2</sub> O	30	30	30	30	30	30	30
L-Aspartic Acid	26.6	26.6	26.6	26.6	26.6	26.6	26.6
L-Cysteine hydrochloride-H <sub>2</sub> O	70	70	70	70	70	70	70
L-Glutamic Acid	29	29	29	29	29	29	29
L-Glutamine	292	292	–	–	292	292	292
L-Histidine hydrochloride-H <sub>2</sub> O	45.8	45.8	45.8	45.8	45.8	45.8	45.8
L-Isoleucine	7.88	7.88	7.88	7.88	7.88	7.88	7.88
L-Leucine	26.2	26.2	26.2	26.2	26.2	26.2	26.2
L-Lysine Hydrochloride	73	73	73	73	73	73	73
L-Methionine	8.96	8.96	8.96	8.96	8.96	8.96	8.96
L-Phenylalanine	9.92	9.92	9.92	9.92	9.92	9.92	9.92
L-Proline	69	69	69	69	69	69	69
L-Serine	21	21	21	21	21	21	21
L-Threonine	23	23	23	23	23	23	23
L-Tryptophan	4.1	4.1	4.1	4.1	4.1	4.1	4.1
L-Tyrosine Disodium Salt	13.5	13.5	13.5	13.5	13.5	13.5	13.5
L-Valine	23	23	23	23	23	23	23
<b>Vitamin</b>							
Biotin	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Choline Chloride	14	14	14	14	14	14	14
D-Calcium Pantothenate	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Folic Acid	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Niacinamide	0.037	0.037	0.037	0.037	0.037	0.037	0.037
Pyridoxine Hydrochloride	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Riboflavin	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Thiamine Hydrochlorid	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Vitamin B12	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Meso-inositol	18	18	18	18	18	18	18
<b>Others</b>							
D-Glucose	1260	1260	1260	1260	1260	1260	–
HEPES	–	–	–	–	–	5958	–
Thymidine	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Hypoxanthine Sodium	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lipoic Acid	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Putrescine Dihydrochloride	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Sodium Pyruvate	220	220	220	220	220	220	220
Phenol Red	3	3	3	3	–	3	3
Penicillin G Sodium Salt	–	100 kU	–	–	–	–	–
Streptomycin Sulfate	–	100	–	–	–	–	–