

Catalog No.	10-070 1X, Liquid Ham's F-10	50-030 Powder Ham's F-10
<b>Inorganic Salts</b>	<b>mg/L</b>	<b>mg/L</b>
CaCl <sub>2</sub> (anhydrous)	33.30	33.30
CuSO <sub>4</sub> (anhydrous)	0.0016	0.0016
FeSO <sub>4</sub> ·7H <sub>2</sub> O	0.834	0.834
KCl	285.00	285.00
KH <sub>2</sub> PO <sub>4</sub>	83.00	83.00
MgSO <sub>4</sub> (anhydrous)	74.60	74.60
NaCl	7400.00	7400.00
Na <sub>2</sub> HPO <sub>4</sub> (anhydrous)	153.70	153.70
NaHCO <sub>3</sub>	1200.00	—
ZnSO <sub>4</sub> ·7H <sub>2</sub> O	0.0288	0.0288
<b>Amino Acids</b>		
L-Alanine	9.00	9.00
L-Arginine·HCl	211.00	211.00
L-Asparagine·H <sub>2</sub> O	15.00	15.00
L-Aspartic acid	13.00	13.00
L-Cysteine·HCl·H <sub>2</sub> O	35.10	35.10
L-Glutamic acid	14.70	14.70
L-Glutamine	146.20	146.20
Glycine	7.50	7.50
L-Histidine·HCl·H <sub>2</sub> O	23.00	23.00
L-Isoleucine	2.60	2.60
L-Leucine	13.00	13.00
L-Lysine·HCl	29.00	29.00
L-Methionine	4.48	4.48
L-Phenylalanine	5.00	5.00
L-Proline	11.50	11.50
L-Serine	10.50	10.50
L-Threonine	3.57	3.57
L-Tryptophan	0.60	0.60
L-Tyrosine·2Na·2H <sub>2</sub> O	2.61	2.61
L-Valine	3.50	3.50
<b>Vitamins</b>		
Biotin	0.024	0.024
D-Calcium pantothenate	0.715	0.715
Choline chloride	0.698	0.698
Folic acid	1.32	1.32
i-Inositol	0.541	0.541
Nicotinamide	0.615	0.615
Pyridoxine·HCl	0.206	0.206
Riboflavin	0.376	0.376
Thiamine·HCl	1.00	1.00
Vitamin B <sub>12</sub>	1.36	1.36
<b>Other</b>		
D-Glucose	1100.00	1100.00
Hypoxanthine, Na	4.77	4.77
Lipoic acid	0.20	0.20
Methyl lineoleate	—	—
Phenol red, Na	1.20	1.20
Putrescine·2HCl	—	—
Sodium pyruvate	110.00	110.00
Thymidine	0.73	0.73
<b>Add</b>		
NaHCO <sub>3</sub> Powder (g/L)	—	1.20
7.5% Solution (mL/L)	—	16.0
<b>Specifications</b>		
pH (before buffer)	N/A	6.5 ± 0.5
pH (after buffer)	7.2 ± 0.2	7.5 ± 0.5
Osmolality (mOsm)	290 ± 30	290 ± 30
Grams of powder required to prepare 1L (1X Solution)	N/A	9.82

Catalog No.	10-080 1X, Liquid Ham's F-12	50-040 Powder Ham's F-12
<b>Inorganic Salts</b>	<b>mg/L</b>	<b>mg/L</b>
CaCl <sub>2</sub> (anhydrous)	33.30	33.30
CuSO <sub>4</sub> (anhydrous)	0.0016	0.0016
FeSO <sub>4</sub> ·7H <sub>2</sub> O	0.834	0.834
KCl	223.60	223.60
KH <sub>2</sub> PO <sub>4</sub>	—	—
MgSO <sub>4</sub> (anhydrous)	72.20	72.20
NaCl	7600.00	7600.00
Na <sub>2</sub> HPO <sub>4</sub> (anhydrous)	142.00	142.00
NaHCO <sub>3</sub>	1176.00	—
ZnSO <sub>4</sub> ·7H <sub>2</sub> O	0.863	0.863
<b>Amino Acids</b>		
L-Alanine	8.90	8.90
L-Arginine·HCl	211.00	211.00
L-Asparagine·H <sub>2</sub> O	15.00	15.00
L-Aspartic acid	13.30	13.30
L-Cysteine·HCl·H <sub>2</sub> O	35.12	35.12
L-Glutamic acid	14.70	14.70
L-Glutamine	146.20	146.20
Glycine	7.50	7.50
L-Histidine·HCl·H <sub>2</sub> O	20.96	20.96
L-Isoleucine	3.94	3.94
L-Leucine	13.10	13.10
L-Lysine·HCl	36.50	36.50
L-Methionine	4.48	4.48
L-Phenylalanine	4.96	4.96
L-Proline	34.50	34.50
L-Serine	10.50	10.50
L-Threonine	11.90	11.90
L-Tryptophan	2.04	2.04
L-Tyrosine·2Na·2H <sub>2</sub> O	7.84	7.84
L-Valine	11.70	11.70
<b>Vitamins</b>		
Biotin	0.0073	0.0073
D-Calcium pantothenate	0.48	0.48
Choline chloride	13.96	13.96
Folic acid	1.30	1.30
i-Inositol	18.02	18.02
Nicotinamide	0.037	0.037
Pyridoxine·HCl	0.062	0.062
Riboflavin	0.038	0.038
Thiamine·HCl	0.34	0.34
Vitamin B <sub>12</sub>	1.36	1.36
<b>Other</b>		
D-Glucose	1802.00	1802.00
Hypoxanthine, Na	4.77	4.77
Lipoic acid	0.21	0.21
Methyl lineoleate	0.088	0.088
Phenol red, Na	1.20	1.20
Putrescine·2HCl	0.16	0.16
Sodium pyruvate	110.00	110.00
Thymidine	0.73	0.73
<b>Add</b>		
NaHCO <sub>3</sub>		
Powder (g/L)	—	1.176
7.5% Solution (mL/L)	—	15.70
<b>Specifications</b>		
pH (before buffer)	N/A	6.5 ± 0.5
pH (after buffer)	7.2 ± 0.2	7.5 ± 0.5
Osmolality (mOsm)	290 ± 30	290 ± 30
Grams of powder required to prepare 1L (1X Solution)	N/A	10.64