

# Ham's F-10 Medium w/ L-Glutamine

12-618



Description	CAS #	Chemical Formula	Concentration		Molarity	
			mg/L	ug/L	mM	uM
Calcium Chloride Anhydrous	10043-52-4	CaCl <sub>2</sub>	33.293	3.329E+04	0.300	299.967
Cupric Sulfate Pentahydrate	7758-99-8	CuSO <sub>4</sub> • 5H <sub>2</sub> O	2.900E-02	29.000	1.161E-04	0.116
Dextrose	50-99-7	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	1.100E+03	1.100E+06	6.106	6.106E+03
Ferrous Sulfate Heptahydrate	7782-63-0	FeSO <sub>4</sub> • 7H <sub>2</sub> O	0.833	833.333	2.997E-03	2.997
Magnesium Sulfate Anhydrous	7487-88-9	MgSO <sub>4</sub>	74.640	7.464E+04	0.620	620.088
Potassium Chloride	7447-40-7	KCl	285.000	2.850E+05	3.823	3.823E+03
Potassium Phosphate Monobasic Anhydrous	7778-77-0	KH <sub>2</sub> PO <sub>4</sub>	83.000	8.300E+04	0.610	609.846
Sodium Bicarbonate	144-55-8	NaHCO <sub>3</sub>	1.200E+03	1.200E+06	14.284	1.428E+04
Sodium Chloride	7647-14-5	NaCl	7.400E+03	7.400E+06	126.626	1.266E+05
Sodium Phosphate, Dibasic Anhydrous	7558-79-4	Na <sub>2</sub> HPO <sub>4</sub>	153.660	1.537E+05	1.082	1.082E+03
Zinc Sulfate Heptahydrate	7446-20-0	ZnSO <sub>4</sub> • 7H <sub>2</sub> O	2.667E-02	26.667	9.275E-05	0.093
L-Alanine	56-41-7	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>3</sub>	8.913	8.913E+03	0.100	100.049
L-Arginine Monohydrochloride	1119-34-2	C <sub>6</sub> H <sub>14</sub> N <sub>4</sub> O <sub>2</sub> • HCl	211.000	2.110E+05	1.002	1.002E+03
L-Asparagine	70-47-3	C <sub>4</sub> H <sub>8</sub> N <sub>2</sub> O <sub>3</sub>	13.200	1.320E+04	9.991E-02	99.909
L-Aspartic Acid	56-84-8	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> CO <sub>2</sub> H	13.300	1.330E+04	9.992E-02	99.925
L-Cysteine Monohydrochloride Monohydrate	7048-04-6	C <sub>3</sub> H <sub>7</sub> NO <sub>2</sub> S • HCl • H <sub>2</sub> O	35.133	3.513E+04	0.200	200.076
L-Glutamic Acid	56-86-0	C <sub>5</sub> H <sub>9</sub> NO <sub>4</sub>	14.700	1.470E+04	9.993E-02	99.932
L-Glutamine	56-85-9	C <sub>5</sub> H <sub>10</sub> N <sub>2</sub> O <sub>3</sub>	146.200	1.462E+05	1.000	1.000E+03
Glycine	56-40-6	HO <sub>2</sub> CCH <sub>2</sub> NH <sub>2</sub>	7.513	7.513E+03	0.100	100.084
L-Histidine Monohydrochloride Monohydrate	5934-29-2	C <sub>6</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub> • HCl • H <sub>2</sub> O	22.980	2.298E+04	0.110	109.637
L-Isoleucine	73-32-5	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>3</sub>	2.600	2.600E+03	1.982E-02	19.822
L-Leucine	61-90-5	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	13.100	1.310E+04	9.987E-02	99.870
L-Lysine Monohydrochloride	657-27-2	C <sub>6</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub> • HCl	29.300	2.930E+04	0.160	160.416
L-Methionine	63-68-3	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> CH <sub>2</sub> SCH <sub>3</sub>	4.480	4.480E+03	3.003E-02	30.027
L-Phenylalanine	63-91-2	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> C <sub>6</sub> H <sub>5</sub>	4.960	4.960E+03	3.003E-02	30.026
L-Proline	147-85-3	C <sub>5</sub> H <sub>9</sub> NO <sub>2</sub>	11.500	1.150E+04	9.989E-02	99.887
L-Serine	56-45-1	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> OH	10.500	1.050E+04	9.991E-02	99.914
L-Threonine	72-19-5	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH(OH)CH <sub>3</sub>	3.573	3.573E+03	3.000E-02	29.998
L-Tryptophan	73-22-3	C <sub>11</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub>	0.600	600.000	2.938E-03	2.938
L-Valine	72-18-4	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH(CH <sub>3</sub> ) <sub>2</sub>	3.500	3.500E+03	2.989E-02	29.889
D-Biotin (Vitamin H)	58-85-5	C <sub>10</sub> H <sub>16</sub> N <sub>2</sub> O <sub>3</sub> S	2.667E-02	26.667	1.092E-04	0.109
D-Calcium Pantothenate (Vitamin B5)	137-08-6	C <sub>18</sub> H <sub>32</sub> CaN <sub>2</sub> O <sub>10</sub>	0.720	720.000	1.511E-03	1.511
Choline Chloride	67-48-1	HOCH <sub>2</sub> CH <sub>2</sub> N(CH <sub>3</sub> ) <sub>3</sub> Cl	0.700	700.000	5.013E-03	5.013
Cyanocobalamin (Vitamin B12)	68-19-9	C <sub>63</sub> H <sub>88</sub> CoN <sub>14</sub> O <sub>14</sub> P	1.360	1.360E+03	1.003E-03	1.003
Folic Acid	59-30-3	C <sub>19</sub> H <sub>19</sub> N <sub>7</sub> O <sub>6</sub>	1.320	1.320E+03	2.990E-03	2.990
Inositol	87-89-8	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	0.540	540.000	2.997E-03	2.997
DL-α-lipoic acid (thioctic acid)	1077-28-7	C <sub>8</sub> H <sub>14</sub> O <sub>2</sub> S <sub>2</sub>	0.200	200.000	9.693E-04	0.969
Niacinamide (Nicotinamide)	98-92-0	C <sub>6</sub> H <sub>6</sub> N <sub>2</sub> O	0.620	620.000	5.077E-03	5.077
Pyridoxine Monohydrochloride	58-56-0	C <sub>8</sub> H <sub>11</sub> N <sub>3</sub> O	0.213	213.333	1.038E-03	1.038
Riboflavin (Vitamin B2)	83-88-5	C <sub>17</sub> H <sub>20</sub> N <sub>4</sub> O <sub>6</sub>	0.380	380.000	1.010E-03	1.010
Thiamine Monohydrochloride (Vitamin B1)	67-03-8	C <sub>12</sub> H <sub>18</sub> N <sub>4</sub> O <sub>4</sub> S	1.013	1.013E+03	3.004E-03	3.004
Thymidine	50-89-5	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>5</sub>	0.733	733.333	3.027E-03	3.027
Phenol Red	34487-61-1	C <sub>19</sub> H <sub>14</sub> O <sub>5</sub> S	1.200	1.200E+03	3.188E-03	3.188
Pyruvic Acid Sodium Salt	113-24-6	CH <sub>3</sub> COCO <sub>2</sub> Na	110.000	1.100E+05	1.000	999.636
L-Tyrosine Disodium Salt, Dihydrate	122666-78-9	C <sub>9</sub> H <sub>9</sub> NO <sub>3</sub> Na <sub>2</sub> • 2H <sub>2</sub> O	2.613	2.613E+03	1.001E-02	10.005
Hypoxanthine Disodium Salt	N/A	C <sub>5</sub> H <sub>2</sub> N <sub>4</sub> O <sub>3</sub> Na <sub>2</sub>	5.460	5.460E+03	3.031E-02	30.315