

Grace's Insect Medium w/o  
Lactalbumin Hydrolysate,  
Yeasolate, Gentamicin or  
FBS

04-457

**Lonza**

Description	CAS #	Chemical Formula	Concentration		Molarity	
			g/L	mg/L	mM	uM
Calcium Chloride Dihydrate	10035-04-8	CaCl <sub>2</sub> • 2H <sub>2</sub> O	0.993	993.000	6.754	6.754E+03
Dextrose	50-99-7	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	0.700	700.000	3.885	3.885E+03
Magnesium Chloride Hexahydrate	7791-18-6	MgCl <sub>2</sub> • 6H <sub>2</sub> O	2.280	2.280E+03	11.215	1.121E+04
Magnesium Sulfate Anhydrous	7487-88-9	MgSO <sub>4</sub>	1.358	1.358E+03	11.282	1.128E+04
Potassium Chloride	7447-40-7	KCl	4.100	4.100E+03	54.997	5.500E+04
Sodium Bicarbonate	144-55-8	NaHCO <sub>3</sub>	0.350	350.000	4.166	4.166E+03
Sodium phosphate monobasic monohydrate	10049-21-5	NaH <sub>2</sub> PO <sub>4</sub> • H <sub>2</sub> O	1.008	1.008E+03	7.305	7.305E+03
Sucrose	57-50-1	C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	26.680	2.668E+04	77.943	7.794E+04
L-Alanine	56-41-7	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>3</sub>	0.225	225.000	2.526	2.526E+03
L-Arginine Monohydrochloride	1119-34-2	C <sub>6</sub> H <sub>14</sub> N <sub>4</sub> O <sub>2</sub> • HCl	0.700	700.000	3.323	3.323E+03
L-Asparagine Monohydrate	5794-13-8	NH <sub>2</sub> COCH <sub>2</sub> CH(NH <sub>2</sub> )COOH • H <sub>2</sub> O	0.398	398.000	2.651	2.651E+03
L-Aspartic Acid	56-84-8	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH <sub>2</sub> CO <sub>2</sub> H	0.350	350.000	2.630	2.630E+03
L-Glutamic Acid	56-86-0	C <sub>5</sub> H <sub>9</sub> NO <sub>4</sub>	0.600	600.000	4.079	4.079E+03
L-Glutamine	56-85-9	C <sub>5</sub> H <sub>10</sub> N <sub>2</sub> O <sub>3</sub>	0.600	600.000	4.105	4.105E+03
Glycine	56-40-6	HO <sub>2</sub> CCH <sub>2</sub> NH <sub>2</sub>	0.650	650.000	8.659	8.659E+03
L-Histidine, Free Base	71-00-1	(C <sub>3</sub> N <sub>2</sub> H <sub>3</sub> )CH <sub>2</sub> CH(NH <sub>2</sub> )COOH	2.500	2.500E+03	16.112	1.611E+04
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>	5.000E-02	50.000	0.381	381.185
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>	7.500E-02	75.000	0.572	571.777
L-Lysine Monohydrochloride	657-27-2	C <sub>6</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub> • HCl	0.625	625.000	3.422	3.422E+03
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>	5.000E-02	50.000	0.335	335.121
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>	0.150	150.000	0.908	908.045
L-Proline	147-85-3	C <sub>5</sub> H <sub>9</sub> NO <sub>2</sub>	0.350	350.000	3.040	3.040E+03
L-Threonine	72-19-5	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH(OH)CH <sub>3</sub>	0.175	175.000	1.469	1.469E+03
L-Tryptophan	73-22-3	C <sub>11</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub>	0.100	100.000	0.490	489.644
L-Valine	72-18-4	HO <sub>2</sub> CCH(NH <sub>2</sub> )CH(CH <sub>3</sub> ) <sub>2</sub>	0.100	100.000	0.854	853.971
D-Biotin (Vitamin H)	58-85-5	C <sub>10</sub> H <sub>16</sub> N <sub>2</sub> O <sub>3</sub> S	1.000E-05	1.000E-02	4.093E-05	0.041
D-Calcium Pantothenate (Vitamin B5)	137-08-6	C <sub>18</sub> H <sub>32</sub> CaN <sub>2</sub> O <sub>10</sub>	2.000E-05	2.000E-02	4.197E-05	0.042
Choline Chloride	67-48-1	HOCH <sub>2</sub> CH <sub>2</sub> N(CH <sub>3</sub> ) <sub>3</sub> Cl	2.000E-04	0.200	1.432E-03	1.432
Folic Acid	59-30-3	C <sub>19</sub> H <sub>19</sub> N <sub>7</sub> O <sub>6</sub>	2.000E-05	2.000E-02	4.531E-05	0.045
I-Inositol	87-89-8	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	2.000E-05	2.000E-02	1.110E-04	0.111
Nicotinic Acid (Niacin)	59-67-6	C <sub>6</sub> H <sub>5</sub> NO <sub>2</sub>	2.000E-05	2.000E-02	1.625E-04	0.162
Pyridoxine Monohydrochloride	58-56-0	C <sub>8</sub> H <sub>11</sub> NO <sub>3</sub>	2.000E-05	2.000E-02	9.728E-05	0.097
Riboflavin (Vitamin B2)	83-88-5	C <sub>17</sub> H <sub>20</sub> N <sub>4</sub> O <sub>6</sub>	2.000E-05	2.000E-02	5.314E-05	0.053
Thiamine Monohydrochloride (Vitamin B1)	67-03-8	C <sub>12</sub> H <sub>18</sub> N <sub>4</sub> O <sub>4</sub> S	2.000E-05	2.000E-02	5.929E-05	0.059
P-Aminobenzoic Acid, PABA	150-13-0	C <sub>7</sub> H <sub>7</sub> NO <sub>2</sub>	2.000E-05	2.000E-02	1.459E-04	0.146
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	7.208E-02	72.083	0.276	275.980
L-Cystine Dihydrochloride	30925-07-6	C <sub>6</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> •2HCl	2.829E-02	28.292	9.033E-02	90.331
Alpha-Keto-Glutaric Acid	328-50-7	C <sub>5</sub> H <sub>6</sub> O <sub>5</sub>	0.370	370.000	2.533	2.533E+03
Succinic Acid	110-15-6	C <sub>4</sub> H <sub>6</sub> O <sub>4</sub>	6.000E-02	60.000	0.508	508.087
Fumaric Acid	110-17-8	C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>	5.500E-02	55.000	0.474	473.852
Beta-Alanine	107-95-9	NH <sub>2</sub> CH <sub>2</sub> .CH <sub>2</sub> COOH	0.200	200.000	2.245	2.245E+03
DL-Serine	302-84-1	C <sub>3</sub> H <sub>7</sub> NO <sub>3</sub>	1.100	1.100E+03	10.466	1.047E+04
L-Malic Acid, Hydroxysuccinic Acid	97-67-6	C <sub>4</sub> H <sub>6</sub> O <sub>5</sub>	0.670	670.000	4.997	4.997E+03
D-Fructose	57-48-7	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	0.400	400.000	2.220	2.220E+03