

Grace's Complete Insect
Medium w/ 10% Heat
Inactivated FBS,
Yeastolate, Lactalbumin,
Hydrolysate & Gentamicin



04-501

| Description | CAS # | Chemical Formula | Concentration | | Molarity | |
|---|-------------|--|---------------|-----------|-----------|-----------|
| | | | g/L | mg/L | mM | uM |
| Calcium Chloride Dihydrate | 10035-04-8 | CaCl ₂ • 2H ₂ O | 0.993 | 993.000 | 6.754 | 6.754E+03 |
| Dextrose | 50-99-7 | C ₆ H ₁₂ O ₆ | 0.700 | 700.000 | 3.885 | 3.885E+03 |
| Magnesium Chloride Hexahydrate | 7791-18-6 | MgCl ₂ • 6H ₂ O | 2.280 | 2.280E+03 | 11.215 | 1.121E+04 |
| Magnesium Sulfate Heptahydrate | 10034-99-8 | MgSO ₄ • 7H ₂ O | 2.780 | 2.780E+03 | 11.279 | 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 ₃ | 0.350 | 350.000 | 4.166 | 4.166E+03 |
| Sodium phosphate monobasic monohydrate | 10049-21-5 | NaH ₂ PO ₄ • H ₂ O | 1.008 | 1.008E+03 | 7.305 | 7.305E+03 |
| Sucrose | 57-50-1 | C ₁₂ H ₂₂ O ₁₁ | 26.680 | 2.668E+04 | 77.943 | 7.794E+04 |
| L-Alanine | 56-41-7 | HO ₂ CCH(NH ₂)CH ₃ | 0.225 | 225.000 | 2.526 | 2.526E+03 |
| L-Arginine Monohydrochloride | 1119-34-2 | C ₆ H ₁₄ N ₄ O ₂ • HCl | 0.700 | 700.000 | 3.323 | 3.323E+03 |
| L-Asparagine Monohydrate | 5794-13-8 | NH ₂ COCH ₂ CH(NH ₂)COOH • H ₂ O | 0.398 | 398.000 | 2.651 | 2.651E+03 |
| L-Aspartic Acid | 56-84-8 | HO ₂ CCH(NH ₂)CH ₂ CO ₂ H | 0.350 | 350.000 | 2.630 | 2.630E+03 |
| L-Glutamic Acid | 56-86-0 | C ₅ H ₉ NO ₄ | 0.600 | 600.000 | 4.079 | 4.079E+03 |
| L-Glutamine | 56-85-9 | C ₅ H ₁₀ N ₂ O ₃ | 0.600 | 600.000 | 4.105 | 4.105E+03 |
| Glycine | 56-40-6 | HO ₂ CCH ₂ NH ₂ | 0.650 | 650.000 | 8.659 | 8.659E+03 |
| L-Histidine, Free Base | 71-00-1 | (C ₃ N ₂ H ₃)CH ₂ CH(NH ₂)COOH | 2.500 | 2.500E+03 | 16.112 | 1.611E+04 |
| L-Isoleucine | 73-32-5 | HO ₂ CCH(NH ₂)CH(CH ₃)CH ₂ CH ₃ | 5.000E-02 | 50.000 | 0.381 | 381.185 |
| L-Leucine | 61-90-5 | HO ₂ CCH(NH ₂)CH ₂ CH(CH ₃) ₂ | 7.500E-02 | 75.000 | 0.572 | 571.777 |
| L-Lysine Monohydrochloride | 657-27-2 | C ₆ H ₁₄ N ₂ O ₂ • HCl | 0.625 | 625.000 | 3.422 | 3.422E+03 |
| L-Methionine | 63-68-3 | HO ₂ CCH(NH ₂)CH ₂ CH ₂ SCH ₃ | 5.000E-02 | 50.000 | 0.335 | 335.121 |
| L-Phenylalanine | 63-91-2 | HO ₂ CCH(NH ₂)CH ₂ C ₆ H ₅ | 0.150 | 150.000 | 0.908 | 908.045 |
| L-Proline | 147-85-3 | C ₅ H ₉ NO ₂ | 0.350 | 350.000 | 3.040 | 3.040E+03 |
| L-Threonine | 72-19-5 | HO ₂ CCH(NH ₂)CH(OH)CH ₃ | 0.175 | 175.000 | 1.469 | 1.469E+03 |
| L-Tryptophan | 73-22-3 | C ₁₁ H ₁₂ N ₂ O ₂ | 0.100 | 100.000 | 0.490 | 489.644 |
| L-Valine | 72-18-4 | HO ₂ CCH(NH ₂)CH(CH ₃) ₂ | 0.100 | 100.000 | 0.854 | 853.971 |
| D-Biotin (Vitamin H) | 58-85-5 | C ₁₀ H ₁₆ N ₂ O ₃ S | 1.000E-05 | 1.000E-02 | 4.093E-05 | 0.041 |
| D-Calcium Pantothenate (Vitamin B5) | 137-08-6 | C ₁₈ H ₃₂ CaN ₂ O ₁₀ | 2.000E-05 | 2.000E-02 | 4.197E-05 | 0.042 |
| Choline Chloride | 67-48-1 | HOCH ₂ CH ₂ N(CH ₃) ₃ Cl | 2.000E-04 | 0.200 | 1.432E-03 | 1.432 |
| Folic Acid | 59-30-3 | C ₁₉ H ₁₉ N ₇ O ₆ | 2.000E-05 | 2.000E-02 | 4.531E-05 | 0.045 |
| Inositol | 87-89-8 | C ₆ H ₁₂ O ₆ | 2.000E-05 | 2.000E-02 | 1.110E-04 | 0.111 |
| NICOTINIC ACID NIACIN | 59-67-6 | C ₆ H ₅ NO ₂ | 2.000E-05 | 2.000E-02 | 1.625E-04 | 0.162 |
| Pyridoxine Monohydrochloride | 58-56-0 | C ₈ H ₁₁ NO ₃ | 2.000E-05 | 2.000E-02 | 9.728E-05 | 0.097 |
| Riboflavin (Vitamin B2) | 83-88-5 | C ₁₇ H ₂₀ N ₄ O ₆ | 2.000E-05 | 2.000E-02 | 5.314E-05 | 0.053 |
| Thiamine Monohydrochloride (Vitamin B1) | 67-03-8 | C ₁₂ H ₁₈ N ₄ O ₄ SCl ₂ | 2.000E-05 | 2.000E-02 | 5.929E-05 | 0.059 |
| Gentamicin Sulfate | 1405-41-0 | N/A | 5.000E-02 | 50.000 | N/A | |
| P-Aminobenzoic Acid, PABA | 150-13-0 | C ₇ H ₇ NO ₂ | 2.000E-05 | 2.000E-02 | 1.459E-04 | 0.146 |
| L-Tyrosine Disodium Salt, Dihydrate | 122666-78-9 | C ₉ H ₉ NO ₃ Na ₂ • 2H ₂ O | 7.208E-02 | 72.083 | 0.276 | 275.980 |
| L-Cystine Dihydrochloride | 30925-07-6 | C ₆ H ₁₂ N ₂ O ₄ S ₂ •2HCl | 2.829E-02 | 28.292 | 9.033E-02 | 90.331 |
| AO Lactalbumin Hydrolysate | 9073-60-3 | NA | 3.330 | 3.330E+03 | N/A | |
| Alpha-Keto-Glutaric Acid | 328-50-7 | C ₅ H ₆ O ₅ | 0.370 | 370.000 | 2.533 | 2.533E+03 |
| Succinic Acid | 110-15-6 | C ₄ H ₆ O ₄ | 6.000E-02 | 60.000 | 0.508 | 508.087 |
| Fumaric Acid | 110-17-8 | C ₄ H ₄ O ₄ | 5.500E-02 | 55.000 | 0.466 | 465.746 |
| Beta-Alanine | 107-95-9 | NH ₂ CH ₂ -CH ₂ COOH | 0.200 | 200.000 | 1.723 | 1.723E+03 |
| Yeastolate | NA | NA | 3.330 | 3.330E+03 | N/A | |
| L-Malic Acid, Hydroxysuccinic Acid | 97-67-6 | C ₄ H ₆ O ₅ | 0.670 | 670.000 | 4.997 | 4.997E+03 |
| Fructose | 57-48-7 | C ₆ H ₁₂ O ₆ | 0.400 | 400.000 | 2.220 | 2.220E+03 |
| DL-Serine NAO | 302-84-1 | C ₃ H ₇ NO ₃ | 1.100 | 1.100E+03 | 10.466 | 1.047E+04 |
| FBS (v/v) Heat Inactivated | N/A | N/A | 10% | | N/A | |