**Ingredients of DMEM/F12 1:1**

**Cat.No.MG8654-S**

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| --- | --- | --- | --- |
| **Components** | **Molecular Weight** | **Concentration (mg/L)** | **mM** |
| **Amino Acids** |  |  |  |
| Glycine | 75 | 18.75 | 0.25 |
| L-Alanine | 89 | 4.45 | 0.049999997 |
| L-Arginine hydrochloride | 211 | 147.5 | 0.69905216 |
| L-Asparagine-H2O | 150 | 7.5 | 0.05 |
| L-Aspartic acid | 133 | 6.65 | 0.05 |
| L-Cysteine hydrochloride-H2O | 176 | 17.56 | 0.09977272 |
| L-Cystine 2HCl | 313 | 31.29 | 0.09996805 |
| L-Glutamic Acid | 147 | 7.35 | 0.05 |
| L-Glutamine | 146 | 365 | 2.5 |
| L-Histidine hydrochloride-H2O | 210 | 31.48 | 0.14990476 |
| L-Isoleucine | 131 | 54.47 | 0.41580153 |
| L-Leucine | 131 | 59.05 | 0.45076334 |
| L-Lysine hydrochloride | 183 | 91.25 | 0.4986339 |
| L-Methionine | 149 | 17.24 | 0.11570469 |
| L-Phenylalanine | 165 | 35.48 | 0.2150303 |
| L-Proline | 115 | 17.25 | 0.15 |
| L-Serine | 105 | 26.25 | 0.25 |
| L-Threonine | 119 | 53.45 | 0.44915968 |
| L-Tryptophan | 204 | 9.02 | 0.04421569 |
| L-Tyrosine disodium salt dihydrate | 261 | 55.79 | 0.21375479 |
| L-Valine | 117 | 52.85 | 0.4517094 |
| **Vitamins** | | | |
| Biotin | 244 | 0.0035 | 1.43443E-05 |
| Choline chloride | 140 | 8.98 | 0.06414285 |
| D-Calcium pantothenate | 477 | 2.24 | 0.004696017 |
| Folic Acid | 441 | 2.65 | 0.006009071 |
| Niacinamide | 122 | 2.02 | 0.016557377 |
| Pyridoxine hydrochloride | 206 | 2.013 | 0.009771844 |
| Riboflavin | 376 | 0.219 | 0.000582447 |
| Thiamine hydrochloride | 337 | 2.17 | 0.006439169 |
| Vitamin B12 | 1355 | 0.68 | 0.000501845 |
| i-Inositol | 180 | 12.6 | 0.07 |
| **Inorganic Salts** | | | |
| Calcium Chloride (CaCl2) (anhyd.) | 111 | 116.6 | 1.0504504 |
| Cupric sulfate (CuSO4-5H2O) | 250 | 0.0013 | 0.0000052 |
| Ferric Nitrate (Fe(NO3)3"9H2O) | 404 | 0.05 | 0.000123762 |
| Ferric sulfate (FeSO4-7H2O) | 278 | 0.417 | 0.0015 |
| Magnesium Chloride (anhydrous) | 95 | 28.64 | 0.30147368 |
| Magnesium Sulfate (MgSO4) (anhyd.) | 120 | 48.84 | 0.407 |
| Potassium Chloride (KCl) | 75 | 311.8 | 4.1573334 |
| Sodium Bicarbonate (NaHCO3) | 84 | 2438 | 29.02381 |
| Sodium Chloride (NaCl) | 58 | 6995.5 | 120.61207 |
| Sodium Phosphate dibasic (Na2HPO4) anhydrous | 142 | 71.02 | 0.50014085 |
| Sodium Phosphate monobasic (NaH2PO4-H2O) | 138 | 62.5 | 0.45289856 |
| Zinc sulfate (ZnSO4-7H2O) | 288 | 0.432 | 0.0015 |
| **Other Components** | | | |
| D-Glucose (Dextrose) | 180 | 3151 | 17.505556 |
| HEPES | 238.3 | 3574.5 | 15 |
| Hypoxanthine Na | 159 | 2.39 | 0.015031448 |
| Linoleic Acid | 280 | 0.042 | 0.00015 |
| Lipoic Acid | 206 | 0.105 | 0.000509709 |
| Phenol Red | 376.4 | 8.1 | 0.021519661 |
| Putrescine 2HCl | 161 | 0.081 | 0.000503106 |
| Sodium Pyruvate | 110 | 55 | 0.5 |
| Thymidine | 242 | 0.365 | 0.001508265 |