**Ingredients of MEM alpha, no nucleosides**

**Cat.No.MG8654-S**

|  |  |  |  |
| --- | --- | --- | --- |
| **Components** | **Molecular Weight** | **Concentration (mg/L)** | **mM** |
| **Amino Acids** |  |  |  |
| Glycine | 75 | 50 | 0.6666667 |
| L-Alanine | 89 | 25 | 0.28089887 |
| L-Glutamine | 146 | 200 | 2 |
| L-Arginine hydrochloride | 211 | 105 | 0.49763033 |
| L-Asparagine-H2O | 132 | 50 | 0.37878788 |
| L-Aspartic acid | 133 | 30 | 0.22556391 |
| L-Cysteine hydrochloride-H2O | 176 | 100 | 0.5681818 |
| L-Cystine | 240 | 24 | 0.1 |
| L-Glutamic Acid | 147 | 75 | 0.5102041 |
| L-Histidine | 155 | 31 | 0.2 |
| L-Isoleucine | 131 | 52.4 | 0.4 |
| L-Leucine | 131 | 52.4 | 0.4 |
| L-Lysine | 146 | 58 | 0.39726028 |
| L-Methionine | 149 | 15 | 0.10067114 |
| L-Phenylalanine | 165 | 32 | 0.19393939 |
| L-Proline | 115 | 40 | 0.3478261 |
| L-Serine | 105 | 25 | 0.23809524 |
| L-Threonine | 119 | 48 | 0.40336135 |
| L-Tryptophan | 204 | 10 | 0.04901961 |
| L-Tyrosine | 181 | 36 | 0.19889502 |
| L-Valine | 117 | 46 | 0.3931624 |
| **Vitamins** | | | |
| Ascorbic Acid | 176 | 50 | 0.2840909 |
| Biotin | 244 | 0.1 | 0.000409836 |
| Choline chloride | 140 | 1 | 0.007142857 |
| D-Calcium pantothenate | 477 | 1 | 0.002096436 |
| Folic Acid | 441 | 1 | 0.002267574 |
| Niacinamide | 122 | 1 | 0.008196721 |
| Pyridoxal hydrochloride | 204 | 1 | 0.004901961 |
| Riboflavin | 376 | 0.1 | 0.000265957 |
| Thiamine hydrochloride | 337 | 1 | 0.002967359 |
| Vitamin B12 | 1355 | 1.36 | 0.00100369 |
| i-Inositol | 180 | 2 | 0.011111111 |
| **Inorganic Salts** | | | |
| Calcium Chloride (CaCl2-2H2O) | 147 | 264 | 1.7959183 |
| Magnesium Sulfate (MgSO4-7H2O) | 246 | 200 | 0.8130081 |
| Potassium Chloride (KCl) | 75 | 400 | 5.3333335 |
| Sodium Bicarbonate (NaHCO3) | 84 | 2200 | 26.190475 |
| Sodium Chloride (NaCl) | 58 | 6800 | 117.24138 |
| Sodium Phosphate monobasic (NaH2PO4-2H2O) | 156 | 158 | 1.0128205 |
| **Other Components** | | | |
| D-Glucose (Dextrose) | 180 | 1000 | 5.5555553 |
| Lipoic Acid | 206 | 0.2 | 0.000970874 |
| Phenol Red | 376.4 | 10 | 0.026567481 |
| Sodium Pyruvate | 110 | 110 | 1 |