**Ingredients of MEM alpha, with nucleosides**

**Cat.No.MG8675-S**

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| --- | --- | --- | --- |
| **Components** | **Molecular Weight** | **Concentration (mg/L)** | **mM** |
| **Amino Acids** |
| Glycine | 75 | 50 | 0.6666667 |
| L-Alanine | 89 | 25 | 0.28089887 |
| L-Arginine hydrochloride | 211 | 105 | 0.49763033 |
| L-Asparagine-H2O | 150 | 50 | 0.33333334 |
| L-Aspartic acid | 133 | 30 | 0.22556391 |
| L-Cysteine hydrochloride-H2O | 176 | 100 | 0.5681818 |
| L-Cystine 2HCl | 313 | 31 | 0.09904154 |
| L-Glutamic Acid | 147 | 75 | 0.5102041 |
| L-Glutamine | 146 | 292 | 2 |
| L-Histidine | 155 | 31 | 0.2 |
| L-Isoleucine | 131 | 52.4 | 0.4 |
| L-Leucine | 131 | 52 | 0.39694658 |
| L-Lysine | 183 | 73 | 0.3989071 |
| 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 disodium salt | 225 | 52 | 0.23111111 |
| L-Valine | 117 | 46 | 0.3931624 |
| **Vitamins** |
| Ascorbic Acid | 176 | 50 | 0.2840909 |
| Biotin | 244 | 0.1 | 4.10E-04 |
| 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 | 2.66E-04 |
| Thiamine hydrochloride | 337 | 1 | 0.002967359 |
| Vitamin B12 | 1355 | 1.36 | 0.00100369 |
| i-Inositol | 180 | 2 | 0.011111111 |
| **Inorganic Salts** |
| Calcium Chloride (CaCl2) (anhyd.) | 111 | 200 | 1.8018018 |
| Magnesium Sulfate (MgSO4) (anhyd.) | 120 | 97.67 | 0.8139166 |
| 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-H2O) | 138 | 140 | 1.0144928 |
| **Ribonucleosides** |
| Adenosine | 267 | 10 | 0.037453182 |
| Cytidine | 243 | 10 | 0.041152265 |
| Guanosine | 283 | 10 | 0.03533569 |
| Uridine | 244 | 10 | 0.040983606 |
| **Deoxyribonucleosides** |
| 2'Deoxyadenosine | 251 | 10 | 0.03984064 |
| 2'Deoxycytidine HCl | 264 | 11 | 0.041666668 |
| 2'Deoxyguanosine | 267 | 10 | 0.037453182 |
| Thymidine | 242 | 10 | 0.041322313 |
| **Other Components** |
| D-Glucose (Dextrose) | 180 | 1000 | 5.5555553 |
| Lipoic Acid | 206 | 0.2 | 9.71E-04 |
| Phenol Red | 376.4 | 10 | 0.026567481 |
| Sodium Pyruvate | 110 | 110 | 1 |