# Media Formulation

## DMEM/F-12

## Cat. No.: CC113-0500

| Components | Concentration (mg/L) |
|---|---|
| **Amino Acids** | |
| Glycine | 18.75 |
| L-Alanine | 4.45 |
| L-Arginine hydrochloride | 147.5 |
| L-Asparagine-$H_2O$ | 7.5 |
| L-Aspartic acid | 6.65 |
| L-Cystine hydrochloride-$H_2O$ | 17.56 |
| L-Cystine 2HCl | 31.29 |
| L-Glutamic Acid | 7.35 |
| L-Glutamine | 365.0 |
| L-Histidine hydrochloride-$H_2O$ | 31.48 |
| L-Isoleucine | 54.47 |
| L-Leucine | 59.05 |
| L-Lysine hydrochloride | 91.25 |
| L-Methionine | 17.24 |
| L-Phenylalanine | 35.48 |
| L-Proline | 17.25 |
| L-Serine | 26.25 |
| L-Threonine | 53.45 |
| L-Tryptophan | 9.02 |
| L-Tyrosine disodium salt dihydrate | 55.79 |
| L-Valine | 52.85 |
| **Vitamins** | |
| Biotin | 0.0035 |
| Choline chloride | 8.98 |
| D-Calcium pantothenate | 2.24 |
| Folic Acid | 2.65 |
| Niacinamide | 2.02 |
| Pyridoxine hydrochloride | 2.0 |
| Riboflavin | 0.219 |
| Thiamine hydrochloride | 2.17 |
| Vitamin B12 | 0.68 |
| i-Inositol | 12.6 |
| **Inorganic Salts** | |
| Calcium Chloride ($CaCl_2$) (anhyd.) | 116.6 |
| Cupric sulfate ($CuSO_4 \cdot 5H_2O$) | 0.0013 |
| Ferric Nitrate ($Fe(NO_3)_3 \cdot 9H_2O$) | 0.05 |
| Ferrous Sulfate ($FeSO_4 \cdot 7H_2O$) | 0.417 |
| Magnesium Chloride (anhyd.) | 28.64 |
| Magnesium Sulfate ($MgSO_4$)(anhyd.) | 48.84 |
| Potassium Chloride (KCl) | 311.8 |
| Sodium Bicarbonate ($NaHCO_3$) | 1200.0 |
| Sodium Chloride (NaCl) | 6995.5 |
| Sodium Phosphate dibasic ($Na_2HPO_4$)(anhyd.) | 71.02 |
| Sodium Phosphate monobasic ($NaH_2PO_4 \cdot H_2O$) | 62.5 |
| Zinc sulfate ($ZnSO_4 \cdot 7H_2O$) | 0.432 |
| **Other Components** | |
| D-Glucose (Dextrose) | 3151.0 |
| HEPES | 3574.5 |
| Hypoxanthine Na | 2.39 |
| Linoleic Acid | 0.042 |
| Lipoic Acid | 0.105 |
| Phenol Red | 8.1 |
| Putrescine 2HCl | 0.081 |
| Sodium Pyruvate | 55.0 |
| Thymidine | 0.365 |