

## Composition

**P04-41505**      **DMEM/F12 (1:1)**  
**w/o: L-Glutamine**  
**w/o: Glucose**  
**w: 11 mg/L  $\text{CaCl}_2$**   
**w: 15 mM HEPES**  
**w/o: Phenol red**  
**w: 2.438 g/L  $\text{NaHCO}_3$**

|                  | Components                             | mg/L     |
|------------------|----------------------------------------|----------|
| Inorganic Salts  | Calcium chloride anhydrous             | 11.00    |
|                  | Iron(III)-nitrate x 9H <sub>2</sub> O  | 0.05     |
|                  | Iron(II)-sulfate x 7H <sub>2</sub> O   | 0.42     |
|                  | Potassium chloride                     | 311.83   |
|                  | Copper(II)-sulfate x 5H <sub>2</sub> O | 0.001    |
|                  | Magnesium chloride anhydrous           | 28.57    |
|                  | Magnesium sulfate                      | 48.85    |
|                  | Sodium chloride                        | 6,999.50 |
|                  | Sodium dihydrogen phosphate anhydrous  | 54.35    |
|                  | di-Sodium hydrogen phosphate           | 70.98    |
|                  | Zinc sulfate x 7H <sub>2</sub> O       | 0.43     |
| Other Components | D(+)-Glucose anhydrous                 | 0.00     |
|                  | HEPES                                  | 3,574.00 |
|                  | Hypoxanthine                           | 2.04     |
|                  | Linoleic acid                          | 0.04     |
|                  | DL-68-Lipoic acid                      | 0.103    |
|                  | Sodium pyruvate                        | 110.00   |
|                  | Phenol red                             | 0.00     |
|                  | Putrescin x 2HCl                       | 0.081    |
|                  | Thymidine                              | 0.36     |

|             |                                      |          |
|-------------|--------------------------------------|----------|
| Amino Acids | L-Alanine                            | 4.45     |
|             | L-Arginine x HCl                     | 147.35   |
|             | L-Asparagine x H <sub>2</sub> O      | 7.50     |
|             | L-Aspartic acid                      | 6.65     |
|             | L-Cystine x 2HCl                     | 31.29    |
|             | L-Cysteine x HCl x H <sub>2</sub> O  | 17.56    |
|             | L-Glutamine                          | 0.00     |
|             | L-Glutamic acid                      | 7.35     |
|             | Glycine                              | 18.75    |
|             | L-Histidine x HCl x H <sub>2</sub> O | 31.48    |
|             | L-Isoleucine                         | 54.37    |
|             | L-Leucine                            | 58.96    |
|             | L-Lysine x HCl                       | 91.37    |
|             | L-Methionine                         | 17.24    |
|             | L-Phenylalanine                      | 35.48    |
|             | L-Proline                            | 17.27    |
|             | L-Serine                             | 26.25    |
|             | L-Threonine                          | 53.55    |
|             | L-Tryptophan                         | 9.02     |
|             | L-Tyrosine x 2Na x 2H <sub>2</sub> O | 55.81    |
|             | L-Valine                             | 52.66    |
| Vitamins    | D-(+)-Biotine                        | 0.004    |
|             | D-Calcium pantothenate               | 2.12     |
|             | Choline chloride                     | 8.98     |
|             | Folic acid                           | 2.66     |
|             | myo-Inositol                         | 12.51    |
|             | Nicotinamide                         | 2.02     |
|             | Pyridoxine x HCl                     | 2.03     |
|             | Riboflavin                           | 0.22     |
|             | Thiamine x HCl                       | 2.17     |
|             | Vitamine B12                         | 0.68     |
|             | NaHCO <sub>3</sub>                   | 2,438.00 |