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|----------------|-----------------------------|--------------|--------------------|
| Document ID:   | TDS-MCP-002-50L             | Version:     | 004                |
| Date of Issue: | 29-APR-2021                 | Approved by: | Anna Becker        |
| Review Date:   | 10-JAN-2022                 | Signature:   | <i>Anna Becker</i> |
| Title:         | <b>TECHNICAL DATA SHEET</b> |              |                    |

|   |  |
|---|--|
| <b>Product Name</b>                     | Dulbecco's Modified Eagle's Medium (DMEM)          |
| <b>Filtration/Treatment</b>             | With high Glucose, L-Glutamine and Sodium Pyruvate |
| <b>Product Codes</b>                    | MCP-002-50L  |
| <b>Shelf Life</b>                       | 4 years  |
| <b>Storage Temperature</b>              | 2 to 8 °C  |
| <b>Shipping Temperature</b>             | ambient  |
| <b>Substance</b>                        | <b>Concentration (mg/L)</b>                        |
| <b>Amino Acids</b>                      |  |
| Glycine                                 | 30.00  |
| L-Arginine, Hydrochloride               | 84.00  |
| L-Cystine, Dihydrochloride              | 63.00  |
| L-Glutamine                             | 584.00   |
| L-Histidine, Hydrochloride, Monohydrate | 42.00  |
| L-Isoleucine                            | 105.00   |
| L-Leucine                               | 105.00   |
| L-Lysine, Hydrochloride                 | 146.00   |
| L-Methionine                            | 30.00  |
| L-Phenylalanine                         | 66.00  |
| L-Serine                                | 42.00  |
| L-Threonine                             | 95.00  |
| L-Tryptophan                            | 16.00  |
| L-Tyrosine, Disodium, Dihydrate         | 104.00   |
| L-Valine                                | 94.00  |
| <b>Vitamins</b>                         |  |
| Choline Chloride                        | 4.00   |
| D-Calcium Pantothenate                  | 4.00   |
| Folic Acid                              | 4.00   |
| Myo-Inositol                            | 7.20   |
| Niacinamide                             | 4.00   |
| Pyridoxine, Hydrochloride               | 4.00   |
| Riboflavin                              | 0.40   |
| Thiamine, Hydrochloride                 | 4.00   |
| <b>Other Components</b>                 |  |
| D-Glucose, Anhydrous                    | 4500.00  |
| Phenol Red, Sodium Salt                 | 15.00  |
| Pyruvic Acid, Sodium Salt               | 110.00   |



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| <b>Inorganic Salts</b>                   | <b>Concentration (mg/L)</b> |
|--|-----------------------------|
| Calcium Chloride, Anhydrous              | 200.00                      |
| Ferric Nitrate, Nonahydrate              | 0.10                        |
| Magnesium Sulfate, Anhydrous             | 97.67                       |
| Potassium Chloride                       | 400.00                      |
| Sodium Chloride                          | 6400.00                     |
| Sodium Phosphate, Monobasic, Monohydrate | 125.00                      |
| <b>Specifications</b>                    |                             |
| Appearance                               | Off-white to orange powder  |
| Solubility                               | 13.49 g/L in ≤ 30 minutes   |
| Moisture Content                         | ≤ 2.0 %                     |
| Particle Size (100 mesh)                 | ≥ 90%                       |
| pH without NaHCO <sub>3</sub>            | 5.6 - 7.2                   |
| pH with NaHCO <sub>3</sub>               | Record                      |
| Osmolality without NaHCO <sub>3</sub>    | 245-285 mM/kg               |
| Osmolality with NaHCO <sub>3</sub>       | Record                      |
| Endotoxin                                | ≤ 1.0 EU/ml                 |
| Mycoplasma                               | Not detected                |
| Cell Culture – Cell Growth Promotion     | 3 Passages                  |
| Viability                                | ≥ 75%                       |

*Note: Sodium Bicarbonate is not included in the powdered media (3700.00 mg/L).*

**THIS PRODUCT IS FOR LABORATORY USE ONLY.**