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|  | Document ID: | TDS-MCL-032-500ML | Version: | 006 |
| | Date of Issue: | 10-JAN-2023 | Approved by: | Dr. Iman Kamranfar |
| | Review Date: | 10-JAN-2025 | Signature: |  |
| | Title: | TECHNICAL DATASHEET | | |

Medium 199 Medium



| | |
|------------------------------|---|
| Filtration/ Treatment | With Earle's Salts and L-Glutamine, without Phenol Red. |
| Product Code | MCL-032-500ML |
| Shelf Life | 12 months from DOM |
| Storage Temperature | +2 to +8°C |
| Shipping Temperature | ambient |

QC Specifications

| Physical and Chemical Analysis | Method | Specifications | Units |
|--------------------------------|-----------------------|--------------------------------|---------|
| Appearance | Visual | Clear to light yellow solution | n/a |
| pH at RT | Electronic pH Meter | 6.9 - 7.5 | n/a |
| Osmolality | Osmometer | 260 - 340 | mOsm/kg |
| Endotoxin | LAL Kinetic | ≤ 1.0 | EU/ml |
| Sterility | | | |
| Aerobic Bacteria | Internally Validated | Not detected | n/a |
| Anaerobic Bacteria | Internally Validated | Not detected | n/a |
| Fungi (Yeast & Mold) | Internally Validated | Not detected | n/a |
| Mycoplasma | qPCR | Not detected | n/a |
| Cell culture | | | |
| Cell growth promotion | Passage test | 3 passages | n/a |
| Viability | Trypan Blue Exclusion | ≥75% | n/a |

Formulation

| Amino Acids | CAS number | Concentration (mg/L) |
|---|-------------|----------------------|
| Glycine | 56-40-6 | 50.00 |
| L-Alanine | 56-41-7 | 25.00 |
| L-Arginine, Hydrochloride | 1119-34-2 | 70.00 |
| L-Aspartic Acid | 56-84-8 | 30.00 |
| L-Cysteine, Hydrochloride, Monohydrate | 7048-04-6 | 0.11 |
| L-Cystine, Dihydrochloride | 30925-07-6 | 26.00 |
| L-Glutamine | 56-85-9 | 100.00 |
| L-Histidine, Hydrochloride, Monohydrate | 5934-29-2 | 21.88 |
| L-Hydroxyproline | 51-35-4 | 10.00 |
| L-Isoleucine | 73-32-5 | 40.00 |
| L-Leucine | 61-90-5 | 60.00 |
| L-Lysine, Hydrochloride | 657-27-2 | 70.00 |
| L-Methionine | 63-68-3 | 15.00 |
| L-Phenylalanine | 63-91-2 | 25.00 |
| L-Proline | 147-85-3 | 40.00 |
| L-Serine | 56-45-1 | 25.00 |
| L-Threonine | 72-19-5 | 30.00 |
| L-Tryptophan | 73-22-3 | 10.00 |
| L-Tyrosine, Disodium, Dihydrate | 122666-87-9 | 57.87 |
| L-Valine | 72-18-4 | 25.00 |
| Vitamins | | |
| (+/-) α-Tocopherol Phosphate, Disodium Salt | 60934-46-5 | 0.01 |
| Biotin | 58-85-5 | 0.01 |
| Choline Chloride | 67-48-1 | 0.50 |
| D-Calcium Pantothenate | 137-08-6 | 0.01 |
| D-Ribose | 50-69-1 | 0.50 |
| Ergocalciferol | 50-14-6 | 0.10 |

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| | | |
|--|------------|---------|
| Folic Acid | 59-30-3 | 0.01 |
| L-Ascorbic Acid | 50-81-7 | 0.05 |
| Menadione Sodium Bisulfite | 6147-37-1 | 0.02 |
| Myo-Inositol | 87-89-8 | 0.05 |
| Niacinamide | 98-92-0 | 0.03 |
| Nicotinic Acid | 59-67-6 | 0.03 |
| para-Aminobenzoic Acid | 150-132-0 | 0.05 |
| Pyridoxine, Hydrochloride | 58-56-0 | 0.05 |
| Riboflavin | 83-88-5 | 0.01 |
| Thiamine, Hydrochloride | 67-03-8 | 0.01 |
| Vitamin A, Acetate | 127-47-9 | 0.14 |
| Other Components | | |
| 2-Deoxy-D-Ribose | 533-67-5 | 0.50 |
| Adenine Sulfate, Dihydrate | 6509-19-9 | 12.13 |
| Adenosine 5'-Monophosphate, Monohydrate | 18422-05-4 | 0.20 |
| Adenosine 5'-Triphosphate, Anhydrous | 56-65-5 | 1.00 |
| Cholesterol | 57-88-5 | 0.20 |
| D-Glucose, Anhydrous | 50-99-7 | 1000.00 |
| Glutathione, Reduced | 70-18-8 | 0.05 |
| Guanine HCl | 635-39-2 | 0.30 |
| Hypoxanthine, Sodium | 45738-97-4 | 0.35 |
| Polysorbate 80 | 9005-65-6 | 20.00 |
| Sodium Acetate, Anhydrous | 127-09-3 | 50.00 |
| Thymine | 65-71-4 | 0.30 |
| Uracil | 66-22-8 | 0.30 |
| Inorganic Salts | | |
| Calcium Chloride, Anhydrous | 10043-52-4 | 200.00 |
| Ferric Nitrate, Nonahydrate | 7782-61-8 | 0.72 |
| Magnesium Sulfate, Anhydrous | 7558-79-4 | 97.70 |
| Potassium Chloride | 7447-40-7 | 400.00 |
| Sodium Bicarbonate | 144-55-8 | 2200.00 |
| Sodium Chloride | 7647-14-5 | 6800.00 |
| Sodium Phosphate, Monobasic, Monohydrate | 10049-21-5 | 140.00 |
| Xanthine, Monosodium Salt | 1196-43-6 | 0.34 |

Product Use: This product is intended for laboratory use only.