



Document ID:	TDS-MCL-075-500ML	Version:	001
Date of Issue:	10-JAN-2023	Approved by:	Dr. Iman Kamranfar
Review Date:	10-JAN-2025	Signature:	
Title:	TECHNICAL DATA SHEET		

Product Name	Minimum Essential Medium (MEM)
Filtration/Treatment	With Earle's salts, L-Glutamine and NEAAs
Product Codes	MCL-075-500ML
Shelf Life	12 months
Storage Temperature	2 to 8 °C
Shipping Temperature	ambient
Substance	Concentration (mg/L)
Amino Acids	
Glycine	7.50
L-Alanine	8.90
L-Arginine, Hydrochloride	126.40
L-Asparagine Monohydrate	15.00
L-Aspartic acid	13.30
L-Cystine, Dihydrochloride	31.20
L-Glutamic Acid	14.70
L-Glutamine	292.00
L-Histidine, Hydrochloride, Monohydrate	41.90
L-Isoleucine	52.50
L-Leucine	52.50
L-Lysine, Hydrochloride	73.00
L-Methionine	15.00
L-Phenylalanine	32.50
L-Proline	11.50
L-Serine	10.50
L-Threonine	47.60
L-Tryptophan	10.00
L-Tyrosine, Disodium, Dihydrate	51.90
L-Valine	46.80
Vitamins	
Choline Chloride	1.00
D-Calcium Pantothenate	1.00
Folic Acid	1.00
Myo-Inositol	2.00
Niacinamide	1.00
Pyridoxal, Hydrochloride	1.00
Riboflavin	0.10
Thiamine, Hydrochloride	1.00
Other Components	
D-Glucose, Anhydrous	1000.00
Phenol Red, Sodium Salt	10.00
Inorganic Salts	
Calcium Chloride, Anhydrous	200.00
Magnesium Sulfate, Anhydrous	97.70
Potassium Chloride	400.00
Sodium Bicarbonate	2200.00



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Sodium Chloride	6800.00
Sodium Phosphate, Monobasic, Monohydrate	140.00

Specifications	
Appearance	Clear, red solution
Aerobic bacteria	Not detected
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Fungi (Yeast & Mold)	Not detected
pH at RT	6.9 - 7.6
Osmolality	260 - 340 mM/kg
Endotoxin	≤ 1.0 EU/ml
Mycoplasma	Not detected
Cell Culture - Cell Growth Promotion	3 Passages
Viability	≥ 75%

THIS PRODUCT IS FOR LABORATORY USE ONLY.