



TECHNICAL DATA SHEET

Reference: MCL-MEM

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Version Date: 01/06/2019

Minimum Essential Medium

Liquid Media

Shelf Life	12 months from DOM	24 months from DOM	24 months from DOM	18 months from DOM	24 months from DOM
Storage	2-8°C	2-8°C	2-8°C	2-8°C	2-8°C
Shipping	ambient	ambient	ambient	ambient	ambient

Product Code	MCL-052	MCL-053	MCL-054	MCL-055	MCL-056
Concentrations	mg/L	mg/L	mg/L	mg/L	mg/L
Amino Acids					
D-Valine					
Glycine		50.0000	50.0000		
L-alanyl-L-glutamine				447.4700	
L-Alanine		25.0000	25.0000		
L-Arginine, Hydrochloride	126.4000	126.4000	126.4000	126.4000	126.4000
L-Asparagine, Monohydrate		50.0000	50.0000		
L-Aspartic Acid		30.0000	30.0000		
L-Cysteine, Hydrochloride, Monohydrate		100.0000	100.0000		
L-Cystine, Dihydrochloride	31.2000	31.2000	31.2000	31.2000	31.2000
L-Glutamine	292.0000				
L-Histidine, Hydrochloride, Monohydrate	41.9000	41.9000	41.9000	41.9000	41.9000
L-Isoleucine	52.5000	52.5000	52.5000	52.5000	52.5000
L-Leucine	52.5000	52.5000	52.5000	52.5000	52.5000
L-Lysine, Hydrochloride	73.0000	73.0000	73.0000	73.0000	73.0000
L-Methionine	15.0000	15.0000	15.0000	15.0000	15.0000
L-Phenylalanine	32.5000	32.5000	32.5000	32.5000	32.5000
L-Proline		40.0000	40.0000		
L-Serine		25.0000	25.0000		
L-Threonine	47.6000	48.0000	48.0000	47.6000	47.6000
L-Tryptophan	10.0000	10.0000	10.0000	10.0000	10.0000
L-Tyrosine, Disodium, Dihydrate	51.9000	52.0000	52.0000	51.9000	51.9000
L-Valine	46.8000	46.0000	46.0000	46.8000	46.8000
Inorganic Salts					
Calcium Chloride, Anhydrous	200.0000	200.0000	200.0000	200.0000	200.0000
Magnesium Chloride, Anhydrous					
Magnesium Sulfate, Anhydrous	97.7000	97.7000	97.7000	97.7000	97.7000
Potassium Chloride	400.0000	400.0000	400.0000	400.0000	400.0000
Sodium Bicarbonate	2200.0000	2200.0000	2200.0000	2200.0000	2200.0000
Sodium Chloride	6800.0000	6800.0000	6800.0000	6800.0000	6800.0000
Sodium Phosphate, Monobasic, Monohydrate	140.0000	140.0000	140.0000	140.0000	140.0000



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Other Components

2'-Deoxyadenosine, Monohydrate		10.0000			
2'-Deoxycytidine, Hydrochloride		11.0000			
2'-Deoxyguanosine Monohydrate		10.0000			
Adenosine		10.0000			
Cytidine, Free Base		10.0000			
D-Glucose, Anhydrous	1000.0000	1000.0000	1000.0000	1000.0000	1000.0000
Guanosine		10.0000			
Lipoic Acid (DL-Thiolic Acid)		0.2000	0.2000		
Phenol Red, Sodium Salt	10.0000	10.0000	10.0000	10.0000	10.0000
Pyruvic Acid, Sodium Salt		110.0000	110.0000		
Thymidine		10.0000			
Uridine		10.0000			

Vitamins

Biotin		0.1000	0.1000		
Choline Chloride	1.0000	1.0000	1.0000	1.0000	1.0000
D-Calcium Pantothenate	1.0000	1.0000	1.0000	1.0000	1.0000
Folic Acid	1.0000	1.0000	1.0000	1.0000	1.0000
L-Ascorbic Acid		50.0000	50.0000		
Myo-Inositol	2.0000	2.0000	2.0000	2.0000	2.0000
Niacinamide	1.0000	1.0000	1.0000	1.0000	1.0000
Pyridoxal, Hydrochloride	1.0000	1.0000	1.0000	1.0000	1.0000
Riboflavin	0.1000	0.1000	0.1000	0.1000	0.1000
Thiamine, Hydrochloride	1.0000	1.0000	1.0000	1.0000	1.0000
Vitamin B12		1.4000	1.4000		

Specifications

	MCL-052	MCL-053	MCL-054	MCL-055	MCL-056
Appearance	Clear Red Solution	Clear Red Solution	Clear Red Solution	Clear Red Solution	Clear Red Solution
Aerobic bacteria	Not detected	Not detected	Not detected	Not detected	Not detected
Anaerobic bacteria	Not detected	Not detected	Not detected	Not detected	Not detected
Fungi (Yeast & Mold)	Not detected	Not detected	Not detected	Not detected	Not detected
pH at RT	6.9 - 7.5	6.9 - 7.5	6.9 - 7.5	6.9 - 7.5	6.9 - 7.5
Osmolality	260 - 340 mM/kg	260 - 340 mM/kg	260 - 340 mM/kg	260 - 340 mM/kg	260 - 340 mM/kg
Endotoxin	≤ 1.0 EU/ml	≤ 1.0 EU/ml	≤ 1.0 EU/ml	≤ 1.0 EU/ml	≤ 1.0 EU/ml
Mycoplasma	Not detected	Not detected	Not detected	Not detected	Not detected
Cell Culture - Cell Growth Promotion	3 Passages	3 Passages	3 Passages	3 Passages	3 Passages
Viability	≥ 75%	≥ 75%	≥ 75%	≥ 75%	≥ 75%