
	Document ID:	TDS-MCP-032-50L	Version:	005
	Date of Issue:	10-JAN-2023	Approved by:	Dr. Iman Kamranfar
	Review Date:	10-JAN-2025	Signature:	
	Title:	<b>TECHNICAL DATASHEET</b>		

## Medium 199



<b>Filtration/ Treatment</b>	With Earle's Salts and L-Glutamine, without Phenol Red.
<b>Product Code</b>	MCP-032-50L
<b>Shelf Life</b>	4 years from DOM
<b>Storage Temperature</b>	+2 to +8°C
<b>Shipping Temperature</b>	ambient

## QC Specifications

Physical and Chemical Analysis	Method	Specifications	Units
Appearance	Visual	Off-white to light-orange powder	n/a
Solubility	Internally validated	9.46 in ≤ 30 minutes	g/L
Moisture Content	Loss-on drying	≤ 2.0 %	n/a
Particle Size (100 mesh)	Internally validated	≥ 90%	n/a
pH without NaHCO <sub>3</sub>	Electronic pH Meter	Record	n/a
pH with NaHCO <sub>3</sub>	Electronic pH Meter	Record	n/a
Osmolality without NaHCO <sub>3</sub>	Osmometer	Record	mOsm/kg
Osmolality with NaHCO <sub>3</sub>	Osmometer	Record	mOsm/kg
Endotoxin	LAL Kinetic	≤ 1.0	EU/ml
Mycoplasma	qPCR	Not detected	n/a
<b>Cell culture</b>			
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
<b>Vitamins</b>		
(+/-) a-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
Folic Acid	59-30-3	0.01
L-Ascorbic Acid	50-81-7	0.05

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Menadione Sodium Bisulfite	130-37-0	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
<b>Other Components</b>		
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	3083-77-0	0.30
<b>Inorganic Salts</b>		
Calcium Chloride, Anhydrous	10043-52-4	200.00
Ferric Nitrate, Nonahydrate	7782-61-8	0.72
Magnesium Sulfate, Anhydrous	7487-88-9	97.70
Potassium Chloride	7447-40-7	400.00
Sodium Chloride	7647-14-5	6800.00
Sodium Phosphate, Monobasic, Monohydrate	10049-21-5	140.00
Xanthine, Monosodium Salt	1196-43-6	0.34

Note: Sodium Bicarbonate is not included in the powdered media (2200.00 mg/L).

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