SERANA Science for Life	Document ID:	TDS-MCP-041-50L	Version:	005
	Date of Issue:	10-JAN-2023	Approved by:	Dr. Iman Kamranfar
	Review Date:	10-JAN-2025	Signature:	
	Title:	**TECHNICAL DATASHEET**		

RPMI 1640

Filtration/ Treatment	With stable Glutamine and Phenol Red.
Product Code	MCP-041-50L
Shelf Life	4 years from DOM
Storage Temperature	+2 to +8°C
Shipping Temperature	ambient

QC Specifications

Physical and Chemical Analysis	**Method**	**Specifications**	**Units**
Appearance	Visual	Light-orange powder	n/a
Solubility	Internally validated	10.56 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 NaHCO3	Electronic pH Meter	Record	n/a
pH with NaHCO3	Electronic pH Meter	Record	n/a
Osmolality without NaHCO3	Osmometer	Record	mOsm/kg
Osmolality with NaHCO3	Osmometer	Record	mOsm/kg
Endotoxin	LAL Kinetic	≤ 1.0	EU/ml
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	10.00
L-alanyl-L-glutamine	39537-23-0	447.47
L-Arginine, Hydrochloride	1119-34-2	242.31
L-Asparagine, Anhydrous	70-47-3	50.00
L-Aspartic Acid	56-84-8	20.00
L-Cystine, Dihydrochloride	30925-07-6	65.00
L-Glutamic acid	56-86-0	200.00
L-Histidine, Anhydrous	71-00-1	15.00
L-Hydroxyproline	51-35-4	20.00
L-Isoleucine	73-32-5	50.00
L-Leucine	61-90-5	50.00
L-Lysine, Hydrochloride	657-27-2	40.00
L-Methionine	63-68-3	15.00
L-Phenylalanine	63-91-2	15.00
L-Proline	147-85-3	20.00
L-Serine	56-45-1	30.00
L-Threonine	72-19-5	20.00
L-Tryptophan	73-22-3	5.00
L-Tyrosine, Disodium, Dihydrate	122666-87-9	29.00
L-Valine	72-18-4	20.00
Vitamins		
Biotin	58-85-5	0.20
Choline Chloride	67-48-1	3.00
D-Calcium Pantothenate	137-08-6	0.25
Folic Acid	59-30-3	1.00
Myo-Inositol	87-89-8	35.00
Niacinamide	98-92-0	1.00
para-Aminobenzoic Acid	150-132-0	1.00
Pyridoxine, Hydrochloride	58-56-0	1.00
Riboflavin	83-88-5	0.20

Thiamine, Hydrochloride	67-03-8	1.00
Vitamin B12	68-19-9	0.01
Other Components		
D-Glucose, Anhydrous	50-99-7	2000.00
Glutathione, Reduced	70-18-8	1.00
Phenol Red, Sodium Salt	34487-61-1	5.00
Inorganic Salts		
Calcium Nitrate, Tetrahydrate	13477-34-4	100.00
Magnesium Sulfate, Anhydrous	7487-88-9	48.84
Potassium Chloride	7447-40-7	400.00
Sodium Chloride	7647-14-5	6000.00
Sodium Phosphate Dibasic, Anhydrous	7558-79-4	800.70

Note: Sodium Bicarbonate is not included in the powdered media (2000.00 mg/L).

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