

DATA SHEET

Rev.ver: 01

1. Identification

Product name	RPMI-1640 With L-Glutamine and Sodium Bicarbonate
Catalog.no	CCML109

2. Description

The Roswell Park Memorial Institute (RPMI) series, developed by Moore and colleagues, comprises media formulated for the in vitro culture of normal and cancerous human cells. Among these, RPMI 1640 is the most widely utilized medium. Adapted from McCoy's 5A medium, RPMI 1640 was initially designed to promote the growth of human lymphoblastoid cells in suspension culture. Today, it is commonly used for a variety of anchorage-dependent cell lines as well. Typically, RPMI 1640 requires supplementation with 5–20% fetal bovine serum, though it is also capable of supporting cell growth without serum. For optimal cell culture results, users should consult relevant literature to determine specific supplementation and growth requirements for individual cell lines.

3. Product Specifications

Appearance	Orangish red colored, clear solution.
CO ₂ concentration, optimum	5.0 %
Storage and shelf life	Store at +2°C to +8°C protected from light.
Shipping conditions	Ambient

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4. Formulation

Components	Concentration mg/L
Amino Acids:	
L-Arginine	200.00
L-Asparagine H ₂ O	50.00
L-Aspartic Acid	20.00
L-Cystine 2HCl	65.00
Glycine	10.00
L-Glutamic Acid	20.00
L-Glutamine	300.000
L-Histidine HCl H ₂ O	20.96
L-Hydroxy-L-Proline	20.00
L-Isoleucine	50.00
L-Leucine	50.00
L-Lysine HCl	40.00
L-Methionine	15.00
L-Phenylalanine	15.00
L-Proline	20.00
L-Serine	30.00
L-Threonine	20.00
L-Tryptophan	5.00
L-Tyrosine 2Na 2H ₂ O	29.00
L-Valine	20.00
Vitamins:	
p-Amino Benzoic Acid	1.00

Components	Concentration mg/L
D-Biotin	0.20
Choline Chloride	3.00
D-Calcium Pantothenate	0.25
Folic Acid	1.00
i-Inositol	35.00
Nicotinamide	1.00
Pyridoxine HCl	1.00
Riboflavin	0.20
Thiamine HCl	1.00
Vitamin B12	0.005
Inorganic Salts:	
Ca (NO ₃) ₂ 4H ₂ O	100.00
MgSO ₄ 7H ₂ O	48.84
KCl	400.00
NaCl	6000.00
Na ₂ HPO ₄	800.00
NaHCO ₃	2000.00
Other Components:	
D-Glucose	2000.00
L-Glutathione Reduced	1.00
Phenol Red Sodium Salt	5.30

5. Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.