

## Product Information

### **RPMI 1640, Powder Medium, 50 L, with L-Glutamine, with 25 mM HEPES, without Sodium Bicarbonate**

Catalog Number: GBPWRP03

## Product Specification

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Appearance	: Off-white to creamy white, homogenous powder
Storage & Shelf Life	: Store at +2°C to +8°C, dry and protected from light. Please refer to product label for expiration date.
Shipping Conditions	: Ambient
Use at	: 16.44 g/L
Add	: 2.0 g/L Sodium Bicarbonate

## Instructions for Use

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### **Preparation of 1 liter liquid medium**

1. Suspend 16.44 g in 900 ml cell culture grade water with constant, gentle stirring until the powder is completely dissolved. Do not heat the water.
2. Add 2.0 g of sodium bicarbonate powder or 26.7 ml of 7.5 % sodium bicarbonate solution for 1 liter of medium and stir until dissolved.
3. Adjust the pH to 0.2 to 0.3 pH units below the desired pH using 1 N HCl or 1 N NaOH since the pH tends to rise during filtration.
4. Add cell culture grade water up to the final volume of 1000 ml.
5. Sterilize the medium immediately by filtering through a sterile membrane filter with porosity of 0.22 micron or less, using positive pressure rather than vacuum to minimize the loss of carbon dioxide.
6. Aseptically add sterile supplements as required and dispense the desired amount of sterile medium into sterile containers.
7. Store liquid medium at +2°C to +8°C and in dark until use.

## Additional Information

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- Concentrated medium preparation is not suggested as it may cause precipitation of low-solubility free base amino acids and salt complexes.
- The pH and sodium bicarbonate concentration of the prepared medium are significant parameters influencing cell development. The surface-to-volume ratio of the culture vessel and the amount of media employed also impact this. In large bottles, releasing huge amounts of carbon dioxide causes a noticeable increase in pH. Optimal pH, sodium bicarbonate content, and surface-to-volume ratios must be calculated for each cell type. We suggest strict pH monitoring. To alter the pH, use sterilized 1 N HCl or 1 N NaOH, or formed bubbles in carbon dioxide.
- If necessary, supplements can be given to the medium before or after filter sterilization while following sterility precautions. The shelf life of the medium will be determined by the type of supplement added to it.

Disclaimer: User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.

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## Formulation

Components	Concentration mg/L	Components	Concentration mg/L
<b>Vitamins:</b>		<b>Amino Acids:</b>	
p-Amino Benzoic Acid	1.00	L-Arginine	200.00
D-Biotin	0.20	L-Asparagine H <sub>2</sub> O	56.82
Choline chloride	3.00	L-Aspartic Acid	20.00
D-Calcium Pantothenate	0.25	L-Cystine 2 HCl	65.20
Folic Acid	1.00	L-Glutamine	300.00
myo-Inositol	35.00	Glycine	10.00
Nicotinamide	1.00	L-Glutamic Acid	20.00
Pyridoxal HCl	1.00	L-Histidine HCl H <sub>2</sub> O	20.27
Riboflavin	0.20	L-Hydroxy-L-Proline	20.00
Thiamine HCl	1.00	L-Isoleucine	50.00
Vitamin B12	0.005	L-Leucine	50.00
<b>Inorganic Salts:</b>		L-Lysine HCl	40.00
Ca(NO <sub>3</sub> ) <sub>2</sub> 4H <sub>2</sub> O	100.00	L-Methionine	15.00
MgSO <sub>4</sub> 7H <sub>2</sub> O	100.00	L-Phenylalanine	15.00
KCl	400.00	L-Proline	20.00
NaCl	6000.00	L-Serine	30.00
Na <sub>2</sub> HPO <sub>4</sub>	800.00	L-Threonine	20.00
<b>Other Components:</b>		L-Tryptophan	5.00
D-Glucose	2000.00	L-Tyrosine 2 Na 2H <sub>2</sub> O	28.83
L-Glutathione Reduced	1.00	L-Valine	20.00
HEPES	5958.00		
Phenol Red Sodium Salt	5.30		

This product is for research use only.

## Need help?

If you have any further queries, please feel free to email our cell culture specialists at [info@genexisbiotech.com](mailto:info@genexisbiotech.com)