

# **RPMI 1640**

w/ L-Glutamine w/o Sodium Bicarbonate w/o Phenol Red

**CAT N°** : P0880

**Theoretical pH** :  $8.2 \pm 0.3$ 

**Osmolality** : 235 mOsm/kg  $\pm$  10%

**Storage conditions** :  $+2^{\circ}C$  to  $+8^{\circ}C$ 

Shelf life : 24 months

**Endotoxin** : < 1 EU/ml

**Composition** : Displayed on website; also available on request.

#### **Recommended use** :

- Respect storage conditions of the product

- Do not use the product after its expiry date

- Store the product in a dry area

- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)

- Protect the product from any form of humidity

- Use, in one time, after opening, the entire quantity of product of the container, without making a concentrated solution (to avoid the formation of precipitates). If it is not possible, close the container immediately after sampling the quantity of powder required.

- Supplements can be added prior to sterile filtration of the medium or aseptically introduced to sterile medium (respect the final concentration of the media). The nature of the supplements may affect storage conditions and shelf life of the medium.

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

#### **Application** :

RPMI 1640 has been used for the culture of normal and neoplasic leukocytes.

#### **Preparation instructions :**

- 1) Measure out 90% of final required volume of water. Water temperature should be 15-20°C.
- 2) While gently stirring the water, add the powdered medium (10.388 g/l). Stir until dissolved. Do not heat.
- 3) Rinse original package with a small amount of water to remove all traces of powder. Add to solution in step 2.

Note: It may be necessary to lower the pH to 4.0 with 1 N HCl to completely dissolve this product. After it has dissolved completely, the pH can be raised to 7.2 with 1 N NaOH prior to the addition of sodium bicarbonate.

- 4) To the solution in step 3, add 2.0g of sodium bicarbonate (CAT N° : P2060) for each litre of final volume of medium being prepared. Stir until dissolved.
- 5) While stirring, adjust the pH of the medium to 0.1-0.3 pH units below the desired pH since it may rise during filtration. The use of 1 N HCl or 1 N NaOH is recommended.
- 6) Add additional water to bring the solution to final volume.
- 7) Sterilize immediately by filtration using a membrane with a porosity of 0.22 microns.
- 8) Aseptically dispense medium into sterile container.



### **Indications of deterioration :**

Dry powder medium should be free flowing. Do not use if powder caked. Prepared medium should be cleared of particulates and flocculent material. Do not use if liquid medium is cloudy or contains precipitate. Other evidence of deterioration may include colour change or degradation of physical or performance characteristics.

## Product code : P0880 Product name : RPMI 1640 w/ L-Glutamine w/o Sodium Bicarbonate w/o Phenol Red

CAS Number	Components	Quantity in g/l
13477-34-4	Calcium Nitrate Tetrahydrate	0.1000000
7487-88-9	Magnesium Sulfate Anhydrous	0.04884000
7447-40-7	Potassium Chloride	0.4000000
7647-14-5	Sodium Chloride	6.0000000
7558-79-4	Sodium Phosphate Dibasic Anhydrous	0.8000000
50-99-7	D-Glucose Anhydrous	2.0000000
56-40-6	Glycine	0.0100000
74-79-3	L-Arginine Free Base	0.2000000
70-47-3	L-Asparagine Anhydrous	0.0500000
56-84-8	L-Aspartic acid	0.02000000
30925-07-6	L-Cystine Dihydrochloride	0.06520000
56-86-0	L-Glutamic Acid	0.0200000
56-85-9	L-Glutamine	0.3000000
71-00-1	L-Histidine	0.01500000
51-35-4	L-Hydroxy-L-Proline	0.02000000
73-32-5	L-Isoleucine	0.0500000
61-90-5	L-Leucine	0.0500000
657-27-2	L-Lysine Monohydrochloride	0.04000000
63-68-3	L-Methionine	0.01500000
63-91-2	L-Phenylalanine	0.01500000
147-85-3	L-Proline	0.02000000
56-45-1	L-Serine	0.0300000
72-19-5	L-Threonine	0.02000000
73-22-3	L-Tryptophan	0.00500000
69847-45-6	L-Tyrosine Disodium Salt Dihydrate	0.02883000
72-18-4	L-Valine	0.02000000
67-48-1	Choline Chloride	0.00300000
58-85-5	D-Biotin	0.00020000
137-08-6	D-Ca Pantothenate	0.00025000
59-30-3	Folic Acid	0.00100000
87-89-8	Myo-Inositol	0.03500000
98-92-0	Nicotinamide (Nicotinic acid amide)	0.00100000
150-13-0	P-Aminobenzoic Acid (PABA)	0.00100000
58-56-0	Pyridoxine Hydrochloride	0.00100000
83-88-5	Riboflavin	0.00020000
67-03-8	Thiamine Hydrochloride	0.00100000
68-19-9	Vitamine B12	0.0000500
70-18-8	L-Glutathione Reduced	0.00100000
WATER		989.61247500