

**RPMI 1640**  
w/L-Glutamine w/o Sodium Bicarbonate

**CAT N°:** PM-R1644

**Storage conditions:** +2°C to +8°C

**Shelf life:** 24 months

**Composition:** Displayed on website and in catalogue; also available on request.

**pH:** 8.1 ± 0.5

**Osmolality:** 237 mOsm/kg ± 10%

**Endotoxin:** < 1 EU/ml

**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 for research or further manufacturing only and not for use as an Active Pharmaceutical Ingredient or food or animal feed.

**Application:**

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

**Uses:**

- 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 (10.393 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 (BioSera CAT N° : PM-S2011) or 26.7 ml of sodium bicarbonate solution (7.5% w/v) (BioSera CAT N° : LM-S2046) 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.

**Signs of deterioration:**

Dry powder medium should be free flowing. Do not use if powder caked. 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.