



## Dulbecco's Phosphate Buffered Saline 10X w/o Calcium w/o Magnesium

**CAT N° :** MSC0566X

**Theoretical pH :** 6.8 ± 0.3

**Osmolality :** >1600 mOsm/kg

**Colour :** colourless, clear solution

**Storage conditions :** Room temperature

**Shelf life :** 48 months

**Sterility tests :**

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

**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 product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)

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

**Applications :**

Dulbecco's Phosphate Buffered Saline (DPBS) is intended for use in the maintenance of mammalian cells where a chemically defined, balanced salt solution provides an environment that will maintain the structural and physiological integrity of cells *in vitro*. DPBS is commonly used in cell enumerations as a diluent, for rinsing cells and as a buffer in many chromatographic procedures. DPBS is also used to wash and resuspend cells during the dissociation process. This product has neither calcium nor magnesium ions in its composition, so it doesn't inhibit the activity of the trypsin.

**Utilisation :**

Supplements, such as antibiotics, should be added as sterile supplements to the buffer solution. Storage conditions and shelf-life of the supplemented product will be affected by the nature of the supplements.

1. Dilute the 10X buffer 1:10 with cell culture grade water. Water temperature should be 15 to 30°C. Do not heat water. Mix completely.
2. While stirring the solution, adjust the pH 6.9 –7.1 using 1N HCl or 1N NaOH. For most cells and culture conditions, the optimal pH of this salt solution after filtration is 7.0-7.4
3. Add deionized or distilled water to the solution to bring it to the final volume. To avoid fluctuations in pH, keep the vessel closed until the solution is filtered.
4. Sterilize the solution using a 0.22 micron filter. A peristaltic pump or an inert gas such as nitrogen can be used to provide positive pressure at 3 – 15 psi. Do not use CO<sub>2</sub> gas.
5. Sterile solutions should be dispensed aseptically into sterile containers. Store buffer solution at 15 to 30°C

**Signs of Deterioration :**

Buffer solution should be clear and free of particulate and flocculent material.

Do not use if buffer solution is cloudy or contains precipitate.

Other evidence of deterioration may include degradation of physical or performance characteristics.