



## Technical data sheet Media Liquid

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### HEPES Buffer Solution (1M)

**CAT N°:** L0180

**Storage conditions:** +2°C to +8°C, protected from light

**Shelf life:** 36 months

**Composition:** 238.31 g/l of HEPES in distilled water

**Colour:** colourless, clear solution

**pH:**  $7.3 \pm 0.3$

**Osmolality:** > 1000 mOsm/kg

**Endotoxin:** < 1 EU/ml

**Sterility tests:**

- bacteria aerobic-anaerobic
- bacteria strictly anaerobic
- fungi / yeast

**Cell Growth test:** Not applicable

**Other tests:** Not applicable

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

**Application:**

HEPES is used in many media because it has more buffering capacity than sodium bicarbonate at physiological pH (7.2 - 7.4) at 37°C. Sodium bicarbonate is nutritionally necessary for most cells, so HEPES should be added in addition to, not in place of, sodium bicarbonate. It is commonly added at 10 – 25 mM concentrations (higher levels may cause cytotoxicity).

**Uses:** Not applicable

**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.



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**Remarks:** Not applicable