

Hanks' Balanced Salt Solution (HBSS)

w/o Calcium w/o Magnesium w/ Sodium Bicarbonate w/ Phenol Red

CAT N° : L0611

Theoretical pH : 7.3 ± 0.3

Osmolality : 280 mOsm/kg +/- 10%

Colour : red, 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.

Application :

Hanks' Balanced Salt Solution (HBSS) 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*.

In summary, the roles of a balanced salt solution are :

- maintenance of intra and extra cellular osmotic balanced
- provision of water and inorganic ions essential for cells metabolism
- provision of energy for cells metabolism thanks to glucose
- buffer effect to maintain the environment in physiological conditions of pH (7.2 – 7.6)

Hanks' salts are designed for maintenance of cells in ambient (non CO₂) atmospheric conditions.

HBSS modified (without calcium, without magnesium) is frequently used to wash and resuspend cells during the dissociation process, where the presence of calcium and magnesium can inhibit the enzymatic activity (trypsin).

Indications 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 colour change or degradation of physical or performance characteristics.