

ISX0507 Hanks Balanced Salts Solution (HBSS) 10X
w/o Calcium w/o Magnesium w/o Sodium Bicarbonate w/o Phenol Red

CAT N°: ISX0507

Storage conditions: Room temperature

Shelf life: 48 months

Composition: Displayed on website; also available on request

Colour: colourless, clear solution

pH: 5.9 ± 0.5

Osmolality: >1600 mOsm/kg

Endotoxin: <1 EU/ml

Sterility tests:

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

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:

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).

Uses:

Use this medium diluted at 1 :10 with cell culture grade water.

After dilution and before use, add 4.7 ml of a sodium bicarbonate solution at 7.5% (CAT N°: ISL0680) per litre of solution.

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

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.

Remarks: Not applicable

COMPOSITION

Hank's Balanced Salts Solution	CAS number	ISX0507	ISX0509	ISX0510	ISX0513	ISP0153	ISP0154
		Liquid mg/l	Liquid mg/l	Liquid mg/l	Liquid mg/l	Powder mg/l	Powder mg/l
Calcium Chloride Dihydrate	10035-04-8	/	1850	/	/	/	185
Magnesium Sulfate Anhydrous	7487-88-9	/	976,7	/	/	/	97,68
Potassium Chloride	7447-40-7	4000	4000	4000	4000	400	400
Potassium Phosphate Monobasic Anhydrous	7778-77-0	600	600	600	600	60	60
Sodium Bicarbonate	144-55-8	/	/	3500	/	/	/
Sodium Chloride	7647-14-5	80000	80000	80000	80000	8000	8000
Sodium Phosphate Dibasic Anhydrous	7558-79-4	478,8	478,8	478,8	478,8	47,88	47,88
D-Glucose Anhydrous	50-99-7	10000	10000	10000	10000	1000	1000
Phenol Red Sodium Salt	34487-61-1	/	110	/	110	/	11

* Other Components

For Research use only

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