



Technical Datasheet

Hanks' Balanced Salt Solution 10X

With Phenol red

Without Calcium chloride, Magnesium sulphate and Sodium bicarbonate

Product Code: TL1122

Product Description:

All media used in tissue culture have a basis of a synthetic mixture of inorganic salts known as a physiological or balanced salt solution (BSS). All the physiological salt solutions have been derived from the salt solution originally described by Sydney Ringer (1885). The first balanced salt solution to be developed specifically for supporting the metabolism of mammalian cells was Tyrode's solution. Since then many modifications have been done to obtain better buffering salt solutions and to prevent calcium precipitation.

The function of a salt solution is:

- To maintain the medium within physiological pH range.
- To maintain intracellular and extra cellular osmotic balance.
- Modified with a carbohydrate, such as glucose serves as an energy source for cell metabolism.
 Hanks' balanced salt solution is designed to equilibrate with air, hence does not require CO₂ air mixture.

TL1122 is 10X Hanks' balanced salt solution with phenol red. It does not contain calcium chloride, magnesium sulphate and sodium bicarbonate. It is designed for use with cells maintained in less CO_2 environment or CO_2 free environment.

Composition:

mg/L

Ingredients

Disclaimer:

INORGANIC SALTS

Disodium hydrogen phosphate, anhydrous 480.000 Potassium chloride 4000.000

IIIg/I

Potassium dihydrogen phosphate anhydrous
Sodium chloride

OTHERS

D-Glucose
Phenol red sodium salt

600.000
80000.000
10000.000
110.000

Directions:

Add 4.7ml of 7.5% sodium bicarbonate solution (TCL013) in 1X balanced salt solution prior to use.

Material required but not provided:

Sodium bicarbonate solution 7.5% (TCL013)

Quality Control:

Appearance

Orangish red colored, clear solution

pH at 10X

5.50 -6.10

pH at 1X

6.20 -6.80

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specifications

Toxicity test

Passes

Endotoxin Content

NMT 1EU/ml

Storage and Shelf Life:

Store at 15-30°C away from bright light. Shelf life is 24 months.

Use before expiry date given on the product label.

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