

# Hanks' Balanced Salt Solution 10X

With Calcium and Magnesium

Without Sodium bicarbonate and Phenol red

**Product Code: TL1109**

## 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 CO<sub>2</sub> air mixture. TL1109 is 10X Hanks' balanced salt solution with calcium and magnesium. It does not contain sodium bicarbonate and phenol red. It is designed for use with cells maintained in less CO<sub>2</sub> environment or CO<sub>2</sub> free environment.

## Composition :

Ingredients	mg/L
<b>INORGANIC SALTS</b>	
Calcium chloride dihydrate	1854.100
Disodium hydrogen phosphate anhydrous	480.000
Magnesium sulphate anhydrous	977.200
Potassium chloride	4000.000
Potassium dihydrogen orthophosphate	600.000
Sodium chloride	80000.000

## OTHERS

Dextrose anhydrous 10000.000

## Directions :

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

## Material required but not provided :

7.5% sodium bicarbonate solution (TCL013)

## Quality Control:

### Appearance

Colourless, clear solution

### pH at 10X

5.80 -6.40

### pH at 1X

6.30 -6.80

### Sterility

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

### 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.

Revision: 02/2019

## Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ Publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.