CDH

Product Specification

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Technical Information

Phosphate Buffered Saline pH 7.4

With 1% Bovine Serum Albumin

Product Code:TS2120

Application:- 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.

TS2120 is Phosphate Buffered Saline pH 7.4 with 1% Bovine Serum Albumin. It is most commonly used for immunohistology procedures.

Composition**

Ingredients	mg / Litre
INORGANIC SALTS	
Disodium hydrogen phosphate, anhydrous	795.000
Potassium dihydrogen phosphate	144.000
Sodium chloride	9000.000
OTHERS	
Bovine Serum Albumin	10000.000

Methodology

1. Suspend 19.9gms in 900ml tissue culture grade waterwith constant, gentle stirring until the powder is completely dissolved. Do not heat the water. Stir until dissolved.
2. Adjust the pH to 0.2-0.3 pH units below the desired pHusing 1N HCl or 1N NaOH since the pH tends to rise during filtration
3. Make up the final volume to 1000ml with tissue culture grade water.
4. Sterilize the solution immediately by filtering through asterile membrane filter with porosity of 0.22 micron or less, using positive pressure rather than vacuum to minimize the loss of carbon dioxide.
5. Aseptically dispense the desired amount of sterile solutioninto sterile containers.
6. Store the liquid solution at 2-8ºC.

Material required but not provided

Tissue culture grade water (TCL1010)
1N Hydrochloric acid (TCL1003)
1N Sodium hydroxide (TCL1002)

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Quality control

Appearance

Off-white to Creamish white, homogenous powder.

Solubility

Clear to slightly hazy solution at 19.9 gms/L

pH without Sodium Bicarbonate

7.00 -7.60

Osmolality without Sodium Bicarbonate

290.00 -330.00

Toxicity test

Passes

Storage and Shelf Life

1.This powdered salt mixture should be stored ambient temperature and prepared salt solution should be stored at 2-8°C. Use before the expiry date. In spite of above recommended storage condition certain powdered salts may show some signs of deterioration /degradation in certain instances. This can be indicated by change in colour, change in appearance and presence of particulate matter and haziness after dissolution.

2. Preparation of concentrated solutions is not recommended as salt complexes having low solubility may precipitate in concentrated solutions.

3. If desired, sterile supplements can be added to the sterile solution observing all sterility precautions. Shelf life of the solution will depend on the nature of supplements added to the solution.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
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- Do not use the products if it fails to meet specifications for identity and performance parameters.