

Product Name

Name: Hanks' Balanced Salt Solution, with Calcium, Magnesium, Phenol Red

Cat. No.: C3570-0500

Size: 500 mL

Product Description

All cell culture media have a basis of a synthetic mixture of inorganic salts known as the physiological or balanced salt solution (BSS). All the physiological salt solutions are derived from the salt solution originally described by Sydney Ringer (1885). The first balanced salt solution 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 the physiological pH range.
- To maintain intracellular and extracellular osmotic balance.

Hanks' Balanced Salt Solution may be modified by adding glucose to serve as an energy source. It is most commonly used together with trypsin solution for tissue disaggregation and monolayer dispersal since the presence of calcium and magnesium ions may hinder the trypsin activity. It is also used for routine immunohistochemical testing and as a general-purpose solution for washing cells in various haematological and molecular biology procedures.

Composition

Ingredients	mg/L	Ingredients	mg/L
INORGANIC SALTS			
Calcium chloride	140.000	Magnesium sulfate	100.000
Potassium chloride	400.000	Sodium chloride	80000.000
Potassium phosphate monobasic	60.000	Sodium bicarbonate	350.000
Magnesium chloride	100.000	Sodium phosphate dibasic	48.000
OTHERS			
D-Glucose	1000.000	Phenol red sodium salt	100.000

Storage and Stability

The product should be kept at **15 - 30°C**.

The product is **light-sensitive** and therefore should not be left in the light.

Shelf life: 24 months from date of manufacture.

Procedure

1. Take a bottle and read the label.
2. Ensure that the cap of the bottle is tight.

3. Gently swirl the solution in the bottle to check if there is any precipitation.
4. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
5. Pipette an appropriate volume of the product using an aseptic/sterile technique under a laminar-flow culture hood.

Quality Control

Hanks' Balanced Salt Solution is tested for sterility, pH, osmolality, and endotoxin.

Precaution and Disclaimer

For research use only, not for clinical diagnosis, and treatment.