



Technical Datasheet

Dulbecco's Phosphate Buffered Saline 10X

Without Phenol red, Calcium and Magnesium

Product Code: TL1022

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.

TL1022 is 10X Dulbecco's Phosphate Buffered Saline without calcium, magnesium and Phenol red. It is most commonly used for tissue disaggregation and monolayer dispersal since presence of calcium and magnesium ions may hinder the trypsin activity.

Composition:

Ingredients	mg/L
INORGANIC SALTS	
Disodium hydrogen phosphate	11500.000
Potassium chloride	2000.000
Potassium phosphate monobasic	2000.000
Sodium chloride	80000.000

Quality Control:

Appearance

Colorless, clear solution

pH at 10X

6.50 - 7.10

pH at 1X

6.90 -7.50

Osmolality at 1X (mOsm/Kg H₂O)

270-310

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.

Disclaimer: Revision: 04/2022

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