



## **Technical Datasheet**

# Krebs-Ringer Bicarbonate Buffer 1X

With 1.8gms Glucose per liter and Sodium bicarbonate Without Calcium Chloride

**Product Code: TL1097** 

### **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 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.

TL1097 is Krebs-Ringer Bicarbonate Buffer with 1.8gms Glucose per liter and sodium bicarbonate.

### **Composition:**

Ingredients	mg/L
INORGANIC SALTS	
Disodium hydrogen phosphate anhydrous	100.000
Magnesium chloride anhydrous	46.800
Potassium chloride	340.000
Sodium bicarbonate	1260.000
Sodium chloride	7000.000
Sodium dihydrogen phosphate anhydrous	180.000
OTHERS	
D-Glucose	1800.000

#### **Quality Control:**

Appearance

Clear, colourless solution

pН

7.00 - 7.60

Osmolality in mOsm/Kg H<sub>2</sub>O

240.00 -280.00

**Sterility** 

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

**Toxicity test** 

Passes

**Endotoxin Content** 

NMT 1 EU/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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