

Technical Information

Ringer Salt Solution Powder

Product Code: DM 1525

Application: Ringer Salt Solution Powder is recommended as an isotonic diluent for food, milk and dairy products during microbiological examinations.

Composition**

Ingredients	Gms / Litre
Sodium chloride	8.500
Potassium chloride	0.200
Calcium chloride	0.200
Sodium bicarbonate	0.010
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Any diluent used in microbiological examination should be isotonic in which the cells are to be suspended. It should also contain a buffer system and certain ions necessary for the optimal maintenance of cells. Ringer Salt Solution Powder is used as an isotonic diluent for microbiological examination of foods and other products ^(1, 2).

Ringer Salt Solution is isotonic and thus prevents bacteria from being subjected to osmotic stress when they are removed from their customary environment. It is physiologically superior to physiological saline for sensitive organisms.

Ringer Salt Solution is used as an isotonic diluting fluid which preserves the cells in their original condition. The salts in the medium balances the osmotic equilibrium of the medium, thereby protecting the organisms from osmotic stress caused due to change in environment.

Methodology

Suspend 8.91 grams of powder media in 1000 ml distilled water. Shake well & heat if necessary to dissolve the medium completely. Dispense as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Physical Appearance

White to cream homogeneous free flowing powder

Colour and Clarity of prepared medium

Colourless clear solution without any precipitate

Reaction

Reaction of 0.89 1% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH range

6.80-7.20

Cultural Response/Characteristics

DM 1525: Satisfactory results are obtained when used as a diluent during bacteriological examination of foods, milk, dairy products as well as for serial dilutions of pure cultures of bacteria

Storage and Shelf Lifez

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. Finegold S. M and Baron E. J, 1986, Bailey and Scotts Diagnostic Microbiology, 7th Edition, The C.V. Mosby Co.
2. Collee J. G., Fraser A. G., Marmion B. P., Simmons A., (Eds.), 1996, Mackie and McCartney, Practical Medical Microbiology, 14th Edition, Churchill Livingstone

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform 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
- **Central Drug House 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 of diagnostic reagents extra.
- 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. Donot use the products if it fails to meet specificatons for identity and performens parameters.