

Ringer Solution, ¼ strength



Solution used for the preparation of isotonic solutions for bacteriology.

• CONTENTS (Liter)

Sodium Chloride	2.25 g
Potassium Chloride	0.105 g
Calcium Chloride	0.12 g
Sodium Bicarbonate	0.05 g
Final pH = 7.0 ± 0.2 at 25°C	

• PROCEDURE

Suspend 2.53 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

• INTERPRETATION

Ringer Solution, ¼ strength is a solution used for the preparation of isotonic solutions for bacteriology. Sodium chloride maintains the osmotic balance. Potassium chloride, calcium chloride and sodium bicarbonate are the buffering agents and provide the essential electrolytes and minerals.

• TECHNIC

Dilute the samples to prepare for microbial test of specimens. Inoculate the prepared specimen using a sterile loop or needle to the medium. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: off white

Prepared medium

Appearance : slightly opalescent with slight precipitates

Color: colorless

Incubation conditions: 30 - 35°C / 18 - 24 hours on TSA

Microorganism	ATCC	Inoculum CFU	Recovery at 45 - 60 minutes
<i>Escherichia coli</i>	25922	50-100	± 50% colonies
<i>Staphylococcus aureus</i>	25923	50-100	± 50% colonies

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Dept. of Health and Social Security (1937) Memo. 139/Foods.
2. Davis, J.G. (1956). Laboratory control of dairy plant. Dairy Industries Ltd., London.

• PACKAGE

Cat. No : MB-R2235 Ringer Solution, ¼ strength	500 G
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