



## Sodium Citrate, 3.8% w/v

R014

### Intended Use:

Sodium citrate is used as anticoagulant to prevent blood from clotting.

### Composition\*\*

#### Ingredients

Sodium citrate	3.80g
Distilled water	100.0ml
Final pH ( at 25°C)	7.9±0.1

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Dispense 0.5 ml of sodium citrate into test tube. Add 4.5 ml blood and mix gently by inversion of the stoppered tube.

### Principle And Interpretation

Sodium citrate is effective as an anticoagulant due to its mild calcium-chelating properties. Sodium citrate addition to blood prevents it from clotting. For coagulation tests like prothrombin time test and partial thromboplastin time test, sodium citrate is the anticoagulant of choice because factor V is relatively stable in citrated blood (1).

### Type of specimen

1. Clinical specimen: Blood

### Specimen Collection and Handling

1. For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3).

### Warning and Precautions

In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations

1. The citrate concentration in 3.8% sodium citrate is higher and its use may result in falsely lengthened clotting times with calcium-dependent coagulation tests i.e., Prolonged prothrombin time (PT) and activated Partial Thromboplastin Time (aPTT) with slightly underfilled samples and with samples with high hematocrits.(4)

### Performance and Evaluation

Performance of the product is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

### Quality Control

#### Appearance

Colourless liquid.

#### Clarity

Clear with no insoluble particles.

#### Reaction

Reaction of the solution at 25°C.

#### pH

7.80-8.00

**Concentration**

3.70%- 3.90%

**Procedure**

Dispense 0.5 ml of sodium citrate into test tube. Add 4.5 ml blood and mix gently by inversion of the stoppered tube.

**Storage and Shelf Life**

Store below 30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

**Disposal**

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (6,7).

**Reference**

1. Bauer J.D., Ackermann P.G. and Toro G. (Eds.), 1974, Clinical Laboratory Methods, 8th ed., The C.V. Mosby Co., St. Louis.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Reneke, J et al. Prolonged prothrombin time and activated partial thromboplastin time due to underfilled specimen tubes with 109 mmol/L (3.2%) citrate anticoagulant. Am J Clin Pathol. 1998;109:754-757.

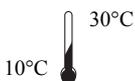
IVD

In vitro diagnostic medical device

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CE Marking



Storage temperature



Do not use if package is damaged

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