Sodium Citrate, 3.8% w/v

**Intended Use:**
Sodium citrate is used as an 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 a test tube. Add 4.5 ml of 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 between 10-30°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