

Product Information

VACUETTE® ESR Sodium Citrate

Closed ESR System 1.5ml and 1.6ml

The **VACUETTE**® Closed 1.5ml and 1.6ml Erythrocyte Sedimentation Rate (ESR) System is for the collection of venous blood specimens for the measurement of ESR within the blood collection tube. Trisodium citrate is the anticoagulant of choice for the collection of blood specimens intended for the determination of the ESR. The method of Westergren is used.

Intended use: **Determination of the ESR**

VACUETTE® Closed 1.5/1.6ml ESR System

The Closed ESR System consists of the following:

- A sterile glass 9/120mm **VACUETTE**® ESR Sodium Citrate Tube with a draw volume of 1.6ml.
- A sterile PP 9/120mm **VACUETTE**® ESR Sodium Citrate Tube with a draw volume of 1.5ml.

The tubes contain a 3.2% (0.109 mol/L) trisodium citrate solution. The mixing ratio is 1 part citrate solution to 4 parts blood. (The 1.5/1.6ml ESR tube is also used in connection with the automatic ESR reader range).

- **VACUETTE**® ESR Stand with scale suitable for 1.5/1.6ml tubes



The closed ESR system delivers the **1 hour Westergren value after 30 minutes reading time.**

Please note, that the determination of the 2 hour Westergren value is not recommended with the closed ESR system due to the narrow graduation on the scale.

VACUETTE® Closed 1.5/1.6ml ESR System

- Gently invert the **VACUETTE**® ESR Tubes 5-10 times immediately after blood collection to reach a proper mix of additive and blood. Inadequate mixing may result in clotting and/or incorrect ESR results. The use of a rotating mixer is recommended.
- Place the ESR Stand on a table or counter where it will not be moved or disturbed for the duration of the test. Do not place close to air conditioning, radiators or instruments which can cause vibrations (e.g. centrifuges, refrigerators). Furthermore, please avoid positions subject to direct sunlight. The workplace must be level. Room temperature should be between +18°C and +25°C.
- Just before performing the test, mix the sample by inverting the tube 5-10 times. Place the properly mixed ESR Tubes into the ESR Stand vertically.
Align 0 mark at top of scale with the bottom of the meniscus of the blood at the blood-air interface.
- Set timer for 30 minutes.
- When timer indicates, note level of meniscus between the settled erythrocytes and the supernatant plasma from scale on ESR Stand.
- After analysis discard ESR Tubes without opening.

Refrigerated specimens can be tested up to 24 hours after collection, provided they are rewarmed to room temperature and are properly mixed before testing. NOTE: An automated ESR system is also available.

Wear gloves during venipuncture and when handling blood collection tubes to minimise exposure hazard.