

The VACUETTE® Closed 2.9ml 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 2.9ml ESR System

The VACUETTE® Closed 2.9ml ESR System consists of the following:

- A sterile 9/120mm VACUETTE® 2.9ml ESR Tube with a draw volume of 2.9ml (item number: 729090). 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.
- VACUETTE® 2.9ml ESR Stand with scale suitable for 2.9ml tubes (item number: 836075)



The closed 2.9ml ESR system delivers the **1 hour Westergren value** after **60 minutes** reading time, the **2 hour Westergren value** after **120 minutes** reading time.

VACUETTE® 2.9ml ESR Tubes Handling

1. Gently invert the VACUETTE® 2.9ml 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.
2. Place the VACUETTE® 2.9ml 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.
3. Just before performing the test, mix the sample by inverting the tube 5-10 times. Place the properly mixed VACUETTE® 2.9ml ESR Tubes into the VACUETTE® 2.9ml ESR Stand vertically. Align 0 mark at top of scale with the bottom of the meniscus of the blood at the blood-air interface.
4. Set timer for 60 minutes.
5. When timer indicates, note level of meniscus between the settled erythrocytes and the supernatant plasma from scale on VACUETTE® 2.9ml ESR Stand. When 2 hour Westergren value is required, repeat point 4 and 5.
6. After analysis discard VACUETTE® 2.9ml 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.