

#### DETAILED INSTRUCTIONS FOR USE:

1. Remove one vial and one pipette from the box.
2. Tap the bottom of the Sedi-Rate™ vial two or three times on the laboratory bench top. The citrate will fall and accumulate at the bottom of the vial.
3. Add 1mL of well mixed EDTA-treated blood to the filling line on the Sedi-Rate™ vial using one of the following methods:
  - a. Insert a transfer pipette (item #3476) through the pierceable stopper.OR
  - b. Insert piercing funnel (item #3475) into the stopper. The funnel will keep the stopper open and facilitate the transfer of blood into the vial using a transfer pipette or by pouring it directly from the original blood collection tube. Then, remove the funnel and dispose of it properly.OR
  - c. Remove the stopper and transfer the blood using a transfer pipette or by pouring it directly from the blood collection tube. Then, place the stopper back on the vial.

**PRECAUTION:** It is recommended that the ESR determination be performed within the first 4 hours after initial collection of the blood sample. If the determination is not going to be performed until 4-12 hours after the collection, it is recommended that the sample be kept cooled at 4°C. Before starting the determination, be sure to bring the sample back to ambient temperature.

**IMPORTANT:** Blood must reach the fill line to achieve accurate results.

4. Gently invert the vial a minimum of 6 times to completely dilute the blood/citrate mixture. Lightly tap the bottom of the Sedi-Rate™ vial on the laboratory bench top. The diluted blood sample will fall and settle at the bottom of the vial.
5. While holding the Sedi-Rate™ pipette at the 150mm mark in one hand and the vial in the other, firmly push the blue rubber plunger completely through the pierceable stopper on the vial, and then stop.
6. Hold the vial in a totally vertical position and use continuous, gentle force to push the pipette completely down to the bottom of the vial. The blood will automatically rise into the pipette and stop at the zero mark.

**NOTE:** The self-sealing aerosol barrier is located at the zero mark. It is activated upon contact with the blood thereby preventing blood and aerosols from penetrating it. Any excess blood will flow over the plunger and remain securely inside the vial.

7. Place the Sedi-Rate™ test unit into the ESR rack and set a timer for exactly 60 minutes.

**PRECAUTION:** The rack and test unit must remain vertical in an area free from vibrations, drafts and direct sunlight. **NOTE:** To ensure a completely level testing surface, use our acrylic leveling platform (item #3459) in conjunction with the appropriate rack.

8. At the end of 60 minutes, the ESR result is read directly from the numerical scale imprinted on the pipette, and is recorded in millimeters. **NOTE:** Upon completion of the determination, dispose of the entire test unit in accordance with all legal regulations and guidelines for the disposal of biohazard and infectious materials.

#### NORMAL VALUES:

Male (under 50): 0-15mm/hour      Female (under 50): 0-20mm/hour  
Male (over 50): 0-20mm/hour      Female (over 50): 0-30mm/hour

#### RECOMMENDATIONS:

- An EDTA tube (lavender top) is recommended for use in sedimentation rate procedures because EDTA has the least effect on erythrocyte morphology. The same EDTA tube can also be used for CBCs and differentials.
- Refrigerated blood must first be brought to room temperature before testing.
- Blood at room temperature (18-25°C) should be tested within 4 hours.
- Blood kept at 4°C should be tested within 6 hours (although stable ESR results have been reported even after storage up to 24 hours at 4°C).

**CAUTION** – As a safety measure, we suggest that all ESR testing be performed using a face shield or other protective device.



#### Customer service, sales and technical support:

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Westergren E.S.R. System

## Sedi-Rate™ Westergren E.S.R. System

SediRate™ and other Globe ESR products are completely closed systems, thereby offering the highest degree of safety. The use of Sedi-Rate™ eliminates splashing, spraying and aerosol hazards, making it an optimum choice for ESR testing in the laboratory.

**Sedi-Rate™** offers a simple, safe, economical and highly-accurate method for performing Westergren ESR determinations.

The polystyrene Sedi-Rate pipette is graduated from 0 to 180mm and features a unique fibrous plug located at the zero mark. The plug is specifically designed to be a self-sealing aerosol barrier that stops hazardous substances from escaping through the top of the pipette.

The polypropylene Sedi-Rate vial features a patented self-sealing stopper that is easily pierced with a transfer pipette or piercing funnel. The vial is supplied pre-filled with 0.25mL of 3.8% trisodium citrate diluent.

To use, simply add 1 mL of EDTA-treated blood to complete the 1 to 4 ratio as required by the Westergren method. Invert several times to mix. Insert the pipette through the pierceable stopper. Then, using continuous force, push the pipette down to the bottom of the vial. The blood will automatically rise into the pipette and stop at the zero mark. Any excess blood is stored in the overflow compartment at the bottom of the vial. Place the test unit in the appropriate rack. At the end of 60 minutes, the numerical results can be read directly from the imprinted scale on the pipette.

See back panel for detailed instructions.



Aerosol barrier plug

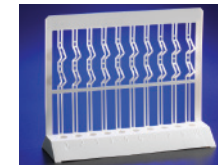
Self-sealing stopper

Vial pre-filled with 0.25mL of 3.8% trisodium citrate diluent

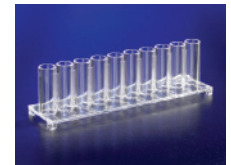


**globe**<sup>®</sup>  
SCIENTIFIC INC.

- Westergren method
- Easy to use
- Closed system for optimal safety
- Shatter-proof plastic components
- Accurate and reproducible results
- Patented pierceable stopper
- Fibrous barrier protects user from hazardous aerosols
- CLIA waived test



3452



3472



3459



3475

### Ordering Information

Item#	Description	Unit
3469	Sedi-Rate ESR System, 100 tests per box	100
3469B	Sedi-Rate ESR System, 1000 tests per case (100/box, 10 boxes/case)	1000
3467	Sedi-Rate ESR System Starter Kit: 100 Sedi-Rate pipettes and vials, 10-place rack with pipette support clamps, leveling platform, 100 piercing funnels and 100 ESR transfer pipettes	Case
3452	10-place rack with pipette support clamps	Each
3472	10-place polystyrene rack	Each
3459	Acrylic leveling platform	Each
3475	Piercing funnels	200
3476	ESR transfer pipettes	500