

Intended Use

For determination of packed cell volume. These instructions are for use with all microhematocrit tubes sold by StatSpin Technologies.

Product Number Description

40mm; for use with RH12 Microhematocrit rotors in the StatSpin Centrifuges

<u>Glass</u>	<u>Anticoagulant</u>
HT9H-10	Ammonium Heparin
HT9U-10	None

SafeCrit® Tubes

HP8H-10	Sodium Heparin
HP8U-10	None

75mm; for use with conventional micro-hematocrit centrifuges

SafeCrit Tubes

HP4H-10	Sodium Heparin
HP4U-10	None

Anticoagulant

The volume of anticoagulant in each microhematocrit tube is sufficient to keep the fill volume of blood in that tube liquid.

Storage

Store all tubes in a cool dry place.

"Use Before" Date

Microhematocrit tubes containing anticoagulant should not be used beyond the date stated on the vial label.

For *in vitro* diagnostic use.

Important Notes on SafeCrit 75mm Tubes

1. 75mm SafeCrit tubes should **not** be used in micro-hematocrit centrifuge rotors that do not fully support the tube. The tubes should lie in a groove fully supported throughout their length. If they are supported only at 2 points, such as provided by concentric rings, high speeds may warp or bend the tube rendering it useless for reading.
2. 75mm SafeCrit tubes do not require additional time or force to achieve adequate packing. The recommended time for standard glass tubes on your conventional centrifuge should be sufficient.
3. When testing spun microhematocrit controls with plastic tubes, expect lower results by 0.5 to 1.5 % (on control values **only**).

Procedure for determining packed red-cell volume

- 1a. Capillary ("fingerstick") blood - prepare a skin site and lance. Use heparinized tubes.
- 1b. Venous blood - take well-mixed anticoagulated blood from a syringe or a vacuum blood collection tube. Use untreated tubes.
- 2.. Hold the microhematocrit tube by one end (may have color-coded band) .
3. Fill to within 1mm of the end of the tube. Remove from sample. Turn microhematocrit tube so **dry** end is ready for accepting the sealing compound.

Procedure for determining packed red-cell volume (cont.)

4. Hold the tube in a horizontal position and push the **dry** (may have color-coded band) end of the tube fully into the vertically held sealing compound. Twist first and remove.
5. Using a laboratory tissue wipe off any blood that is forced from the other end.
6. Put the tube, sealed end towards the outer rim, in the Microhematocrit Rotor. Position cover in place and secure. Centrifuge the tube for 2 minutes on a StatSpin Centrifuge or the recommended time on your conventional micro-hematocrit centrifuge.

Quality Control

1. Quality Control procedures established for your laboratory should be followed.
2. To verify the adequacy of cell packing, select one or more tubes, (preferably with a hematocrit over 50), centrifuge and read. Spin these tubes a second time. The difference between the initial reading and the second reading should be 1 percent or less.

Helpful Hints for Collecting and Sealing Fingerstick Samples

1. When drawing a fingerstick, wipe the first drop of blood and then collect with only steady pressure. Do not milk the finger.
2. Use capillary tubes treated with some anticoagulant (e.g. heparin).
3. Blood should be drawn into one end and the tube then turned so that the "dry" end is sealed. Sealant holds better in the "dry" end. (The "dry" end refers to the end of the microhematocrit tube that is not used to introduce the blood into the tube).
4. When sealing the "dry" end of the tube, hold the sealant vertical to the tube. Push the tube in and then twist before pulling out. The "twisting" creates a better seal of the clay to the glass or plastic tube.
5. If clay isn't holding and specimens are lost frequently, try two shots of clay sealant in the "dry" end of the tube. Also, examine and replace the rotor cushions frequently.
6. Always make sure the clay sealant is towards the outside of the rotor when placing the tubes in the rotor.

References:

1. National Committee for Clinical Laboratory Standards. Approved Standard, "Procedure for Determining Packed Cell Volume by the Microhematocrit Method." Document H7-A, Vol. 5, No. 5.
2. National Committee for Clinical Laboratory Standards. Approved Standard, July 1991, "Procedures for Collection of Diagnostic Blood Specimens by Skin Puncture." Document H4-A3, Vol. 11, No. 11.

StatSpin, Inc.
85 Morse Street
Norwood, MA 02062 USA

Phone: 800-782-8774
781-551-0100
FAX: 781-551-0036