

SAFE-T-FILL® Plastic Blood Gas Capillary Tubes FAQ

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**Blood Gas questions:****What kind of heparin should I be using for my blood gas testing?** [top ↗](#)

It all depends on the testing required and type analyzer you are using. Blood Gas only and PKU analyses can be done with all heparin derivatives. Sodium heparin cannot be used for electrolytes performed on blood gas analyzers because it will increase sodium levels. Ammonium heparin is the least used because of its interference with many ions. Lithium heparin is most widely used but cannot be used for lithium or ionized calcium testing. Balanced heparin is quickly becoming the heparin of choice because of ionized calcium testing requirements. RAM Scientific offers blood gas capillary tubes with balanced heparin and sodium heparin.

**What is balanced heparin?** [top ↗](#)

Balanced heparin is a proportionally balanced heparin that can perform a variety of analytic tests. This can be obtained in several ways and is dependent on the manufacturer. Our balanced heparin is a mixture of sodium and lithium heparin, but proportionally balanced so analytes like sodium, lithium, and ionized calcium results can be performed.

**What are the dimensions of the blood gas capillary tubes?** [top ↗](#)**Dimensions of SAFE-T-FILL® Plastic Blood Gas Capillary Tubes**

Item #	ID	OD	Length	Volume
06 0005	1.3mm	2.1mm	85mm	115µL
06 0007	1.3mm	2.1mm	110mm	150µL
06 0009	1.3mm	2.1mm	170mm	230µL
06 0185	1.3mm	2.1mm	85mm	115µL
06 0186	1.3mm	2.1mm	110mm	150µL
06 0187	1.3mm	2.1mm	170mm	230µL

ID=inner diameter OD=outer diameter

**Do I have to use the fleas and magnet with the blood gas capillary tubes?** [top ↗](#)

Although each lab should establish their own appropriate specimen management procedures, it is a requirement to mix the specimen after procurement to allow the heparin to dissolve into the blood to prevent it from clotting. This can be done by using the flea and magnet technique or by rolling the tube between your palms for at least one minute or until testing is performed. It is also strongly recommended to remix specimens prior to analysis by either rolling the tube between your palms for at least 15 seconds or by inserting a metal flea and mixing from end to end with an external magnet for at least 5 seconds. Care should be taken when doing this so that hemolysis does not occur; this could increase potassium and decrease ionized calcium results. Over mixing may also result in pO<sub>2</sub> changes (contamination with room air).

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**How do I clean the magnet and flea after use?** [top ↗](#)

The magnet can be disinfected between uses with a standard laboratory disinfectant. The magnet should also be dried with gauze after saturation with the disinfectant. The fleas should be

discarded after use in a biohazard plastic or metal container. An alternative method to the magnet and flea technique is rolling the capillary tube between your palms for at least one minute.

**What is the concentration of sodium heparin in the blood gas capillary tubes?** [top ↗](#)

The concentration is 25 +/- 10 IU/mL.

**What is the concentration of balanced heparin in the blood gas capillary tubes?** [top ↗](#)

The concentration is 20-30 IU/mL.

**At what temperature should the blood gas capillary tubes be stored at prior to analysis?** [top ↗](#)

NAACLS recommends that plastic be transported at room temperature and analyzed as soon as possible.

**Do the end caps for the plastic blood gas capillary tubes fit on our glass Natelson tubes ?** [top ↗](#)

Yes. Our end caps are adaptable to the glass Natelson tubes as well.

**Can I use your blood gas capillary tubes as a transfer device for newborn testing such as PKU's?** [top ↗](#)

Yes. The anticoagulant requirement for a transfer device is heparin, so any of our blood gas tubes would be appropriate for this kind of testing.

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