Evacuated blood collection tubes for easy and safe sample collection.
In 1987, Greiner Labortechnik developed the world’s first plastic evacuated blood collection tube. The innovative VACUETTE® system made its United States debut in 1997.

**STANDARD TUBES**

- Color-coded safety caps are designed to minimize the spraying of aerosols during decapping.
- Optimal fill marks on every tube label indicate the proper volume for correct blood-to-additive ratios.
- Tubes are evacuated according to the blood volume specification to ensure the correct blood-to-additive ratio.
- Thick tube walls ensure tube integrity in extreme temperature variations.
- Additives are spray-dried on the inside of the tube wall for disbursement and mixing optimization.

**SAFELY COLLECT, TRANSPORT AND PROCESS BLOOD**

VACUETTE® Blood Collection Tubes are used to collect, transport and process blood for testing serum, plasma or whole blood in the clinical laboratory.

They are available in a variety of tube sizes and draw volumes as low as 1mL, as well as a range of additives for several analytical test methods.

The tubes, additive concentrations, volumes of liquid additives, and their permitted tolerances, as well as the blood-to-additive ratios, are in accordance to the requirements and recommendations of the international standards ISO 6710 and the Clinical and Laboratory Standards Institute’s Approved Standards (CLSI).

**AVAILABLE TUBE SIZES AND VOLUMES**

- Standard 13x75mm, 13x100mm and 16x100mm sizes
- Low volume tubes designed at standard 13x75mm tube size with draw volumes of 2.5mL or less to minimize the amount of blood collected from critically ill, pediatric and frequently drawn patients.

<table>
<thead>
<tr>
<th>Tube Size</th>
<th>Draw Volumes (mL)</th>
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</thead>
<tbody>
<tr>
<td>13x75mm</td>
<td>1.0, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0</td>
</tr>
<tr>
<td>13x100mm</td>
<td></td>
</tr>
<tr>
<td>16x100mm</td>
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</tbody>
</table>
No additive
- Contain no additives or clot activators.

Sodium Citrate
- Filled with buffered tri-sodium citrate solution with a citrate concentration of 3.2% (0.109mol/L).
- High-altitude options available for locations 5,000 feet or more above sea level.

Serum
- Coated with micronized silica particles to activate clotting when tubes are gently inverted.
- Available with or without gel separator.

Heparin
- Heparin activates antithrombins, which block the coagulation cascade and yield a whole blood/plasma sample.
- Available as lithium heparin, lithium heparin with gel separator, or sodium heparin.

EDTA
- EDTA binds calcium ions and blocks the coagulation cascade.
- Available as K2EDTA, K2EDTA with gel separator, or K3EDTA.

Glycolytic Inhibitor
- Contain an antiglycolytic agent, sodium fluoride, and an anticoagulant, potassium oxalate.
- Suitable for the analysis of blood glucose and lactate.

Trace Element
- Contain sodium heparin.
- Do not contain a clot activator.

RING INDICATORS
Color-coded rings indicate draw volume or the presence of gel or sodium heparin.

GOLD/YELLOW
- Gel separator
- Low volume draw

BLACK
- Standard draw

GREEN
- Sodium heparin

WHITE
- Single use only
Greiner Bio-One developed the VACUETTE® Coagulation Tube, known as a “sandwich” tube due to its patented double-wall technology, in 1996.

The inner tube is made of polypropylene (PP) and prevents the evaporation of the sodium citrate additive to maintain the correct blood-to-additive ratio. The outer tube is made of polyethylene terephthalate (PET), which maintains the vacuum for maximum shelf life.

Two-step stopper

The VACUETTE® SAFETY Cap used on coagulation tubes is designed with a two-step stopper to seal both the inner and outer tubes for a longer shelf life.

Fill range indicator

Coagulation tube labels feature an arrow-shaped marker indicating the fill range where sample volume will yield the necessary 9:1 blood-to-additive ratio.

3.2% citrate concentration (0.109mol/L)

High-altitude options available for locations 5,000 feet or more above sea level.

RIGOROUS QUALITY STANDARDS

Product quality is of the highest priority for Greiner Bio-One, which is why our production locations are ISO 9001 and ISO 13485 certified. All products are also CE marked and FDA 510(k) cleared.

EXCEPTIONAL SUPPORT

Everything we do and the way we do it is designed to make your work easier. We understand your needs and workflows, which means we can offer real added value and trust in long-term, sustainable relationships.

SUSTAINABLE MANUFACTURING

As a producer of plastic medical products, Greiner Bio-One is committed to creating a sustainable global future and aims to be climate neutral by 2030.