# Specimen Collection Tubes

## BLOOD SPECIMENS

<table>
<thead>
<tr>
<th>Stopper/Label Color</th>
<th>Laboratory Use</th>
<th>Additives/Inversions at Collection</th>
</tr>
</thead>
</table>
| 1                   | Culture Bottles | For detection of microbial growth from blood specimens. | Soybean-casein digest broth  
9 – 10 gentle inversions unless otherwise noted |
| 2                   | Light Blue      | For coagulation determinations. **Note:** Certain tests may require chilled specimens. Follow recommended procedures for collection and transport. Inversions prevent clotting. | 0.105 M sodium citrate (3.2%)  
3 – 4 inversions |
| 3                   | Gold           | Serum Separator Tube (SST®) for serum determinations in chemistry and serology. Contains separator gel and should not be used for toxicology or drug testing. Inversions ensure mixing of clot activator with blood. Blood clotting time 30 minutes. | Clot activator and gel for serum separation  
5 inversions |
| 4                   | Red            | For serum determinations in chemistry and serology, and for toxicology and drug testing. Glass serum tubes are recommended for blood banking. Plastic tubes contain clot activator and are not recommended for blood banking. Inversions ensure mixing of clot activator with blood and clotting within 30-60 minutes. | Clot activator  
5 inversions (plastic)  
None (glass) |
| 5/6                 | Green or Tan   | For plasma determinations in chemistry. Inversions prevent clotting. Use only sodium heparin green-top tubes for all cytogenetic testing. | Sodium heparin  
Lithium heparin  
8 – 10 gentle inversions |
| 5/6                 | Lavender       | For lead determinations. This tube is certified to contain less than 0.01 µg/mL (ppm) lead. Inversions prevent clotting. | Sodium heparin (glass)  
K₃ EDTA (plastic)  
8 – 10 gentle inversions |
| 5/6                 | Royal Blue     | K₃ EDTA for whole blood hematology determinations and immunohematology testing (ABO grouping, Rh typing, antibody screening). Inversions prevent clotting. | Spray-dried K₃ EDTA  
8 – 10 gentle inversions |
| 7                   | Gray and white label | For trace-element, toxicology and nutritional-chemistry determinations. Special stopper formulation provides low levels of trace elements. | Sodium heparin  
Na₂ EDTA  
None (serum tube)  
8 – 10 gentle inversions |
| 8                   | Yellow and white label | For glucose determinations. Oxalate and EDTA anticoagulants will give plasma samples. Sodium fluoride is the antiglycolytic agent. Inversions ensure proper mixing of additive and blood. | Potassium oxalate/sodium fluoride  
Sodium fluoride/Na₂ EDTA  
8 – 10 gentle inversions |
| 9                   | Gray           | Glass tube with liquid ACD for use in blood bank studies, HLA phenotyping, DNA, paternity testing, etc. | Acid Citrate Dextrose (ACD) solutions  
A/B additives – Trisodium citrate 22.0/13.2, citric acid 8.0/4.8 and dextrose 24.5/14.7 (in g/L)  
8 – 10 gentle inversions |

**Note:** Always refer to tube label to confirm tube type – never rely on the stopper color alone.

## URINE SPECIMENS

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| Gray and yellow label | For culture and sensitivity (C&S) urine testing. **Minimum urine volume is 4 mL.** For lower volumes, submit refrigerated urine in a sterile container without preservatives. | Boric acid, sodium formate  
Shake vigorously |
| Yellow plastic and yellow label | For urinalysis testing. Inversions ensure preservative is properly mixed. Note the fill lines. Do not under fill (<2 mL) or over fill (>10 mL). | Preservative  
8 – 10 gentle inversions |

For questions regarding specimen collection tubes not shown here, contact Client Services or your Sales Representative.

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