

# Technical Information Sheet

## High Speed Chemically Strengthened Centrifuge Tubes

Kimble Article Nos. 45500 & 45600

Kimble Chase 15 & 30 mL reusable strengthened centrifuge tubes are manufactured from Type I, Class B, borosilicate glass. The tubes have been chemically strengthened to achieve a greater mechanical strength than standard borosilicate centrifuge tubes.

Strengthened centrifuge tubes can be used repeatedly if the user follows the guidelines listed below.



Approx. O.D. x Length (mm)	Capacity (mL)	Max. RCF	Max. Temperature
18 x 102	15	13,100	300 °C
24 x 106	30	13,100	300 °C

### Centrifugation

Tubes can be centrifuged up to 13,100 RCF when used with appropriate rubber adapter sleeves (Kimble Article Nos. 45550-15 for 15 mL tubes and 45550-30 for 30 mL tubes are recommended) in a 50 mL rotor cavity. Tubes should be handled and cleaned carefully and must be inspected for chips, scratches or abrasions before use.

**WARNING: Tubes containing chips, scratches, abrasions or similar defects CANNOT be centrifuged to the maximum RCF.** The rubber adapter sleeve must be discarded if breakage occurs. Glass particles from the breakage can become embedded in the rubber causing scratching of subsequent tubes placed in the sleeve.

### Heating and Sterilization

Tubes can be heated to a maximum of 300 °C. Heating at higher temperatures can damage the tubes and reduce their mechanical strength. **WARNING: Tubes that have been heated beyond the above specifications must not be centrifuged to the maximum RCF.** Tubes can be sterilized in an autoclave at 121 °C for 15 minutes at 15 psi. Dry heat sterilization can be performed using temperatures up to 300 °C.

### Cleaning

Tubes may be cleaned using a nonabrasive glassware detergent by hand or in an automatic glass washer. Drying temperatures should not exceed the recommendations listed above. Avoid brushes or other devices that could cause abrasions or scratches.



45550 Rubber Adapter Sleeve