

# Corning® 15 mL and 50 mL Centrifuge Tubes

CORNING

Thank you for choosing Corning® disposable plastic centrifuge tubes for your research needs. This document contains product specifications, application guidelines, scientific support, and re-ordering information for 15 mL and 50 mL tubes.

## Product Specifications

- ▶ Rating up to 17,000 RCF
- ▶ Sterile
- ▶ RNase-/DNase-free
- ▶ Nonpyrogenic

**Materials:** Corning centrifuge tubes are available in two standard materials: polypropylene (PP) and polyethylene terephthalate (PET). Polypropylene tubes provide excellent chemical resistance and mechanical strength. They are strong, moderately rigid, and well-suited for most disposable centrifuge applications. PET tubes offer excellent optical clarity for ease of measurement, observation, and test recording.

**Caps:** These tubes are available with two styles of polyethylene screw-top caps: the advanced Corning CentriStar™ cap and the original plug seal cap. The CentriStar cap has an easy-on/easy-off flat top and offers advanced ergonomics with its wider knurls and roll-over edge design for easier gripping. This leakproof design comes with a revolutionary plug feature that prevents seepage when used under recommended conditions. The plug seal cap is an original Corning design featuring a contoured plug for a tight, secure seal. This Corning plug seal product design has successfully passed the 95 kPa (14 psi) pressure test as referenced in IATA Dangerous Goods Regulations.



## Characteristics of Corning® Centrifuge Tubes

The following information is provided to serve as a general guideline for determining suitability of Corning centrifuge tubes for your applications. In addition, Corning recommends following the procedures outlined by the centrifuge manufacturer, as well as conducting a trial run to determine proper conditions before beginning any critical applications.

Corning centrifuge tubes are tested for leakage. They should not break or leak if used in a properly balanced rotor with suitable carriers, holders, and adapters that fully support the tubes when run in accordance with the guidelines in this section. These tubes are intended for one-time use only; reuse is not recommended as breakage or leakage may occur.

The recommended working temperature range for Corning centrifuge tubes is 0°C to 40°C. The suitability of these tubes for storage below 0°C depends on both the solution and the storage conditions. In general, the polypropylene and PET tubes are more resistant to stress at low temperatures than polystyrene. It is strongly recommended that a trial run be performed under actual conditions to test the suitability of the tubes for frozen storage.

### Suggestions for Safe Centrifugation

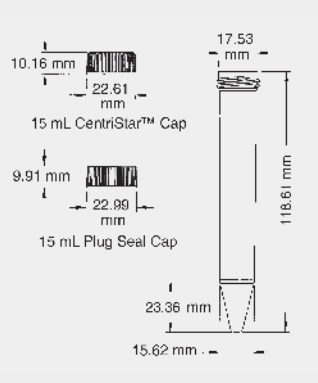
- ▶ **Caution:** When centrifuging pathogenic organisms, specimens known or suspected of being infectious, or any other potentially infectious or hazardous materials, approved safety containment systems should be used. Contact your centrifuge manufacturer for appropriate accessories or recommendations.
- ▶ Proper balancing and distribution of the load in a centrifuge is critical for optimum performance and to prevent damage to the tubes or centrifuge. Opposing buckets or loads should always be balanced within the range specified by the manufacturer. Tubes should always be distributed in the buckets with respect to the center of rotation as well as the pivotal axis of the bucket. Failure to do this may prevent the bucket from achieving a horizontal position during the centrifugation run. Uneven separations or tube failure may result.

These centrifuge tubes are intended for use by persons knowledgeable in safe laboratory practices. Failure can result from surface damage, exceeding the specified RCF values, using unsuitable support systems, improper temperatures, or incompatible chemicals.

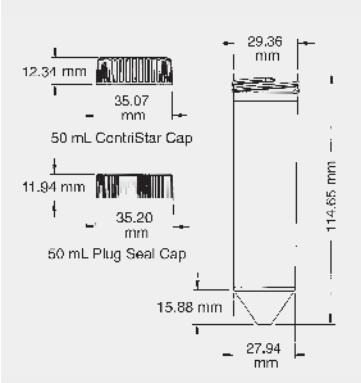
### Chemical Compatibility of Disposable Plastic Centrifuge Tubes

The mechanical strength, flexibility, color, weight, and dimensional stability of all plastic centrifuge tubes are affected to varying degrees by the chemicals with which they come in contact. Specific operating conditions, especially temperature, RCF, rotor type, carrier design, and run length will also affect tube performance.

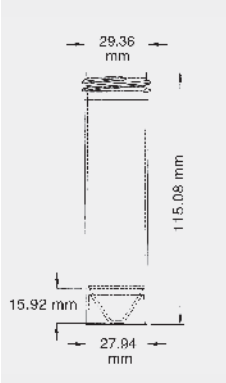
Dimensions of Corning® Centrifuge Tubes and Caps



15 mL centrifuge tube and caps



50 mL centrifuge tube and caps



50 mL self-standing centrifuge tube

**Temperature Stability:** The recommended working temperature range for Corning centrifuge tubes is 0°C to 40°C. The suitability of these tubes for storage below 0°C depends on both the solution and the storage conditions. It is strongly recommended that a trial run be performed under actual conditions to test the suitability of the tubes for frozen storage. Do not freeze tubes using Corning® foam racks.

**Chemical Compatibility:** The mechanical strength, flexibility, color, weight, and dimensional stability of all plastic centrifuge tubes are affected to varying degrees by the chemicals with which they come in contact. Specific operating conditions, especially temperature, relative centrifugal force (RCF), rotor type, carrier design, and run length will also affect tube performance. **Always conduct a trial run to determine proper conditions before use.**

Chemical Resistance of Disposable Plastic Centrifuge Tubes\*

Chemical Class	Polyethylene Terephthalate	Polypropylene	Polyethylene Caps
Acids (weak)	1	1	1
Acids	3	1	1
Alcohols	1	1	1
Aldehydes	3 <sup>a</sup>	2 <sup>a</sup>	1
Bases	3	1	1
Esters	2	2	2
Hydrocarbons:			
Aliphatic	1	2	3
Aromatic	3	3 <sup>b</sup>	3
Halogenated	3	3	3
Ketones	2	2 <sup>c</sup>	2

\*At room temperature for 24 hours.  
1 = Recommended; 2 = Suitable for most applications. However, a trial run under specific operating conditions is recommended; 3 = Not recommended.  
<sup>a</sup>Formaldehyde, rated 1.  
<sup>b</sup>Phenol, rated 1.  
<sup>c</sup>Acetone, rated 1.

## Ordering Information

### Corning® 15 mL Centrifuge Tubes

Cat. No.	Material	Cap Style	Max. RCF	Feature	Qty/Pk	Qty/Cs
430053	PET	Plug seal	3,600	Conical bottom	50/sleeve	500
430055	PET	Plug seal	3,600	Conical bottom	50/rack	500
430052	PP	Plug seal	12,000	Conical bottom	50/rack	500
430766	PP	Plug seal	12,000	Conical bottom	50/sleeve	500
430790	PP	CentriStar™	12,000	Conical bottom	50/rack	500
430791	PP	CentriStar	12,000	Conical bottom	50/sleeve	500

### Corning 50 mL Centrifuge Tubes

Cat. No.	Material	Cap Style	Max. RCF	Feature	Qty/Pk	Qty/Cs
430290	PP	Plug seal	15,500	Conical bottom	25/rack	500
430291	PP	Plug seal	15,500	Conical bottom	25/sleeve	500
430304	PET	Plug seal	3,600	Conical bottom	25/rack	500
430828	PP	CentriStar	17,000	Conical bottom	25/rack	500
430829	PP	CentriStar	17,000	Conical bottom	25/sleeve	500
4558	PP	CentriStar	17,000	Conical bottom	25/rack	300
431526	PP	Plug seal	15,500	Easy ID color strip – green, conical bottom	25/rack	300
431527	PP	Plug seal	15,500	Easy ID color strip – orange, conical bottom	25/rack	300
431528	PP	Plug seal	15,500	Easy ID color strip – blue, conical bottom	25/rack	300
431525	PP	Plug seal	15,500	Hazard labeling, conical bottom	25/rack	300
430897	PP	Plug seal	3,000	Self-standing bottom	25/sleeve	500
430921	PP	CentriStar	3,000	Self-standing bottom	25/sleeve	500

## Scientific Support

For additional product or technical information, please e-mail us at [ScientificSupport@corning.com](mailto:ScientificSupport@corning.com), visit [www.corning.com/lifesciences](http://www.corning.com/lifesciences), or call 800.492.1110. Outside the United States, call 1.978.442.2200.

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