## Caps for Corning® Plastic Labware





Vented caps allow faster gas exchange while reducing spills.



Corning 1L and 3L disposable spinner flasks with the optional aseptic transfer caps attached.



Corning CentriStar caps offer an easy-on/easy-off flat top cap design for improved ergonomic handling and grip.

Corning features a variety of cap designs on our disposable plastic labware. Most of these caps are made from high density polyethylene and should not be autoclaved. Caps for the polycarbonate Erlenmeyer flasks and square polycarbonate storage bottles are made from polypropylene. Due to their unique storage requirements, cryogenic vials are described in a section below.

1. Plug seal caps feature flexible plugs designed to push against the inside rim of the vessel, providing a liquid- and gas-tight seal. These caps are available on some cell culture flasks, culture tubes, roller bottles, centrifuge tubes, and most plastic storage bottles. This cap design was a Corning innovation that was first used in 1974.



2. Solid flat top (phenolic-style) caps use a ring on the inside of the cap to seal against the inside rim of the vessel. These caps do not have liners and are available on some plastic cell culture flasks, roller bottles, Corning CellSTACK® chambers, spinner flasks, Erlenmeyer flasks, and all Corning CentriStar™ centrifuge tubes.



3. **Vented caps** contain a 0.2 μm nonwetting (hydrophobic) membrane sealed to the cap, isolating the container it is placed on from the environment while allowing gas exchange and reducing spills. These caps are highly recommended for use in all CO<sub>2</sub> incubators, especially for long-term use. They are available on cell culture flasks, roller bottles, Erlenmeyer flasks, and CellSTACK chambers. They are available as an option for spinner flasks. Vented caps were a Corning innovation first used in 1988.



**4. Aseptic transfer caps** are for filling disposable 1L, 2L, and 3L Erlenmeyer flasks, 500 mL and 1L spinner flasks, and CellSTACK chambers. These transfer caps will both reduce contamination and enhance the productivity of your cell culture operations.

## **Caps for Plastic Corning Vessels**

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Solid Flat Top	Plug Seal	Vented	Aseptic Transfer		
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•					
	Solid Flat Top		Solid Flat Top Plug Seal Vented		

<sup>\*</sup>Optional: These caps must be purchased separately.

There are three types of polypropylene caps used on Corning® cryogenic vials:

1. Internal threaded stopper style caps are leak-free when properly tightened. The silicone washers are designed to seal best when only slightly compressed. NOTE: Excessive tightening of the cap will cause the washer to bulge, resulting in poor sealing. These caps are not leak-proof when submerged in liquid nitrogen and should not be used in this manner due to the danger of explosion. WARNING: To avoid injury, DO NOT immerse plastic or glass cryogenic vials in liquefied gases such as liquid nitrogen. Vials immersed in liquefied gases can develop leaks. When such vials return to room temperature, rapid pressure can build up and shatter the vials, or cap seals. Harmful or biohazard materials contained in the vials can release during the venting of pressurized gas. Always store vials only in the vapor phase ABOVE any liquefied gas.





2. External threaded rim seal caps also use silicone washers for sealing. The silicone washers are designed to seal best when only slightly compressed. NOTE: Excessive tightening of the cap will cause the washer to bulge, resulting in poor sealing. These caps are not leak-proof when submerged in liquid nitrogen and should not be used in this manner due to the danger of explosion. WARNING: To avoid injury, DO NOT immerse plastic or glass cryogenic vials in liquefied gases such as liquid nitrogen. Vials immersed in liquefied gases can develop leaks. When such vials return to room temperature, rapid pressure can build up and shatter the vials, or cap seals. Harmful or biohazard materials contained in the vials can release during the venting of pressurized gas. Always store vials only in the vapor phase ABOVE any liquefied gas.

## **Caps for Corning Cryogenic Vials**

	Cryogenic Vial Size			
Cap Style	1.2 mL	2.0 mL	4.0 mL	5.0 mL
Internal threaded stopper style caps, with washer		•	-	•
External threaded rim seal caps, with washer		•	•	•

For more specific information on claims, visit www.corning.com/certificates.

Warranty/Disclaimer: Unless otherwise specified, all products are for research use or general laboratory use only.\* Not intended for use in diagnostic or therapeutic procedures. Not for use in humans. These products are not intended to mitigate the presence of microorganisms on surfaces or in the environment, where such organisms can be deleterious to humans or the environment. Corning Life Sciences makes no claims regarding the performance of these products for clinical or diagnostic applications. \*NOTE: The following products and their sterile accessories are considered US class I medical devices: Tissue culture plates, flasks and dishes (area >100 cm²), multilayer flasks, spinner flasks, Erlenmeyer flasks, Corning HYPERFlask® vessels, Corning CellSTACK® chambers, centrifuge tubes, cell culture tubes, cryogenic vials, roller bottles, microcarrier beads. Falcon IVF products are US class II and CE marked per the EU medical device directive 93/42/EEC.

India



**Cryogenic Vial** 

Appropriate safety

equipment (gloves, face shields, biological safety

cabinets, hoods, etc.)

to protect personnel

should always be used

when removing plastic vials or glass ampules

from cryogenic storage

systems.

**Safety Tip** 

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