Thermo Scientific CentriPAK BioProcess Container User Instructions



Precaution and Safety

Before using the Thermo ScientificTM CentriPAKTM BioProcess Container (BPC), read this document carefully and follow the instructions. Failure to follow the instructions and safety information in this document will result in the expiration of the seller's warranty.

Refer to the Sorvall™ BIOS 16 user guide for rotor and device related information.

Prior to using the Thermo Scientific CentriPAK BPC, a general understanding of bioreactors and harvesting is important.

Intended Use

The Thermo Scientific CentriPAK BPC is intended for centrifugation in biotechnological applications. The CentriPAK BPC is specifically designed for use in combination with Sorvall BIOS 16 centrifuges and 8 x 2000 mL or 6 x 2000 mL swinging bucket rotors.

Thermo Scientific CentriPAK BPC is not approved or intended for, and should not be used for, medical, clinical, surgical, or other patient-oriented applications.

Unpacking the CentriPAK BPC

- 1. Inspect the condition of the shipping box for signs of damage.
- 2. Open the box, ensuring the protective outer polyethylene (PE) bag (Sterilization barrier) is not damaged. Inspect the outer PE bag for signs of damage.

Notice: If damaged, sterilization may be compromised. Do not use and call your sales representative.

- 3. Remove the contents from the bag.
- Before using, remove CentriPAK BPC from inner protective PE bag. Ensure protective bag is not damaged.
- Inspect the CentriPAK BPC for signs of damage.

Chemical Resistance

The compatibility between chemicals and plastic centrifuge ware is affected by temperature, chemical concentration, g-force, length of run, and other factors. Check the Centrifuge manual for chemical compatibility ratings. Because of the stresses associated with centrifugation, these ratings are a general guide only.

We recommend a trial run before using a certain chemical.

Product Description

The Thermo Scientific CentriPAK BPC consists of six 1.7 L BPC chambers along with the components as shown in the figure below. The CentriPAK BPC chamber is constructed from CX3-9 film.

CentriPAK BPC chambers are available in 1.7 L size and are arranged into multi-container manifold configurations.

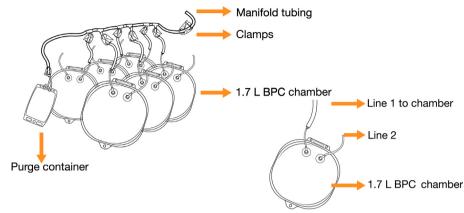


Figure 1. CentriPAK BPC - Six 1.7 L BPC chambers are arranged into a multi-container manifold.

Instruction

- Place the filled 1.7 L CentriPAK BPC chamber in CentriPAK BPC Adapter (75003873). Fill level
 can be checked by weight. Manifold CentriPAK chambers can be filled uniformly using CentriPAK
 BPC Adapter Rack (75003889).
- Disconnect each CentriPAK BPC chamber using a sealer or welder. Fold tubing close to seal and place the provided vinyl cap over the fold to secure. Alternatively, use forceps on tube for connecting and capping of quick connects (www.fishersci.com; 9705674).
- Tuck tubing around inside of the adapter close to liquid level, and for volumes less than 1.6 L, place the CentriPAK BPC Chamber Spacer (75003843) in between the adapter and tubing. Ensure that pointed edges are padded or above liquid level to avoid puncture or deformation of film.
- 4. Place the adapter with the CentriPAK BPC chamber into the rotor bucket. Refer to Centrifuge user guide for more information on balancing load.
- After centrifugation, remove the adapter with CentriPAK BPC chamber from the Centrifuge.
 Be careful to not disturb the pellet. Untuck tubing and remove the CentriPAK BPC chamber from the adapter.
- Connect each CentriPAK BPC chamber to the CentriPAK Labtainer™ BPC (75003883) by welding line 2, or use Luer-Lock or quick connect each CentriPAK to a Labtainer BPC or to a similar BPC.
- 7. Transfer supernatant into CentriPAK Labtainer BPC using CentriPAK BPC Separator (75003888), pump, or gravity. If using pump or gravity with unstable pellet, use CentriPAK BPC Hanging Rack (75003892) or similar to hold chamber upright and place CentriPAK BPC Clip (75003886) just above pellet after two-thirds of supernatant is removed.
- 8. Stop supernatant flow before pellet exits the tube.

Product Specification

CentriPAK BPC			
Cat. No.	75003880		
Description	6×1.7 L harvest manifold (sterilized) for sterilized connect, quick connect, or weld-on 3/8 in. ID, (1/8 in. wall) connection		
Package	Set of 2		
Material	CX3-9 film		
Max. Capacity	10.2 L		
Life Time	Single-Use		
1.7 L BPC chamber			
Maximum fill level	1.7 L		
Line to chamber	Tubing: Weldable (TPE) tubing, Length: 25 cm (10 in.) ID x wall: 0.32 cm x 0.16 cm (1/8 in. x 1/16 in.)		
Line 2	Tubing: Weldable (TPE) tubing, Length: 36 cm (14 in.) ID x wall: 0.32 cm x 0.16 cm (1/8 in. x 1/16 in.)		
Port type	Face port		
Connections	Weld-on 1/8 in. ID, (1/16 in. wall) connection		
Maximum Sample Density	1.2 g/mL		
Temperature	4 °C to 40 °C		
RPM/G-Force	4700 rpm / 7187 x g		
Centrifuge	Thermo Scientific Sorvall BIOS 16		
Rotor	8 x 2000 mL swinging bucket rotor or 6 x 2000 mL swinging bucket rotor to be used with the adapter 75003873		
Manifold			
Overall length	Tubing assembly with chambers and connections - 64 in.		
Connections	Sterilized connect, quick connect, or 18 in. weldable (TPE) tubing 3/8 in. ID (1/8 in. wall) connection		
Clamps	1/2 in 3/4 in. (1.27 cm - 1.9 cm) and 3/16 in 3/8 in. (0.47 cm - 0.95 cm)		
Purge container	1000 mL, 5/32 in. ports (CX5-14 film) Tubing: Weldable (TPE) tubing, Length 36 cm (14 in.) ID x wall: 0.32 cm x 0.16 cm (1/8 in. x 1/16 in.)		

	CentriPAK BPC Single	CentriPAK BPC Single with Quick Connect	
Cat. No.	75003885	75003891	
Description	1.7 L CentriPAK BPC (sterilized) with two 1/8 in. ID, 1/4 in. OD tubing for weld-on or Luer-Lock connection	1.7 L CentriPAK BPC (sterilized) with two 1/4 in. ID with quick connects	
Package	Set of 2	Set of 12	
Material	CX3-9 film		
Life Time	Single-Use		
Line 1	Vinyl end cap, 7/16 in. Polypropylene Luer-Lock Female and Plug 1/8 in. Tubing: Weldable (TPE) tubing Length: 15 cm (6 in.) ID x wall: 0.32 cm x 0.16 cm (1/8 in. x 1/16 in.)	Polysulfone quick connect with Insert and Cap 1/4 in. Tubing: Weldable (TPE) tubing Length: 5 cm (2 in.) ID x wall: 0.64 cm x 0.16 cm (1/4 in. x 1/16 in.)	
Line 2	Tubing: Weldable (TPE) tubing Length: 36 cm (14 in.) ID x wall: 0.32 cm x 0.16 cm (1/8 in. x 1/16 in.)	Polysulfone quick connect with Body and Plug 1/4 in. Tubing: Weldable (TPE) tubing Length: 5 cm (2 in.) ID x wall: 0.64 cm x 0.16 cm (1/4 in. x 1/16 in.)	
Maximum Sample Density	1.2 g/mL		
Temperature	4 °C to 40 °C		
RPM/G-Force	4700 rpm / 7187 x g		
Centrifuge	Thermo Scientific Sorvall BIOS 16		
Rotor	$8 \times 2000 \ \text{mL}$ swinging bucket rotor or $6 \times 2000 \ \text{mL}$ swinging bucket rotor to be used with the adapter 75003873		
Package			
Certifications	Certificate of Analysis provided with each batch for each delivery Certificate of irradiation		
Sterilization	Irradiation (25 – 40 kGy)		
Label	Description, Product code, and Lot number Expiration date on outer packaging and shipping container		