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Storage and transport containers

Plastic and stainless steel solutions



Storage and transport solutions

Use Thermo Scientific™ single-use systems to store and transport process liquids, buffers, media, and bulk drug precursors.

Our rigid support containers hold close-system Thermo Scientific™ BioProcess Containers (BPCs) and open-top tank liners for harvest and storage, or process liquid transportation.

Our reusable support containers accommodate a variety of sizes and processes

- Plastic—for in-house and transportation applications
 - Top-drain only and top- and bottom-drain, high-density polyethylene (HDPE) cylindrical drums
 - Square or rectangular polypropylene (PP) containers
 - Cylindrical HDPE, PP, Linear Low-density polyethylene (LLPDE) tanks
- Stainless steel—Thermo Scientific™ HyPerforma™ Smartainer™ 3.0 systems are used for in-house, large-volume liquid-handling operations and range from 200 to 3,000 L.

Outer support containers for both production processes and transportation

- In-process/internal unit operations—Our HyPerforma Smartainer 3.0 systems, Thermo Scientific™ plastic rigid outer support containers, drums and Nalgene cylindrical tanks are used with closed-system BPCs and open-top tank liners for process liquid preparation and storage, and waste collection needs.
- Transport—Large-volume liquid shipping in our Thermo Scientific plastic square and rectangular support containers and cylindrical drums.

Selecting BPCs and the correct support containers

These multiple design considerations help determine the ideal container solution for your process needs:

- Application—Storage, mixing, waste collection, or shipping
- Batch size, filling, and emptying—Determines the volume and port size
- Number of process steps—Determines the number of ports and their location
- Location of process step—Clean room-ready containers for clean room operations











Cylindrical drums

Thermo Scientific™ drums provide a qualified shipping system for BPCs.

Key features

- Bottom- and top-drain options with a locking lid
- Multiuse for shipping and storage applications
- Rugged LLDPE construction
- Ergonomic design for ease of use
- Matching dolly available for mobility
- 50 L to 250 L size options available

BPC options

- Standard BPCs available in Thermo Scientific™ CX5-14 and Aegis™ 5-14 films
- Custom BPCs available in Thermo Scientific™ ASI™ 26/77 films
- Standard tank liners available in Thermo Scientific™ Aegis5-14, CX3-9 and ASI 26 films



Cylindrical drum specifications

	Description	Size	Dimensions (D x H)	Cat. No.
	Flat-bottom linear LLDPE drum, top dispense, with clamps	50 L	45 x 53 cm (19.25 x 21.75 in.)	SV50076.02
		100 L	45 x 79 cm (19.25 x 35 in.)	SV50076.03
		200 L	59 x 93 cm (23.5 x 36.75 in.)	SV50076.04
	Conical LLDPE drum, 1 port, size: 4.5 cm (1.75 in.) with clamps	50 L	60 x 58 cm (23.5 x 23 in.)	SV50517.04
		100 L	60 x 76 cm (23.5 x 29.75 in.)	SV50517.05
		200 L	60 x 114 cm (23.5 x 44.75 in.)	SV50517.06
	Conical LLDPE drum, 1 port, size: 5.1 cm (2 in.) with clamps	250 L	60 x 133.4 cm (23.5 x 52.5 in.)	SV50517.40
	Conical LLDPE drum, 1 port, size: 10.2 cm (4 in.) with clamps; use support plate	50 L	60 x 58 cm (23.5 x 23 in.)	SV50517.08
		100 L	60 x 76 cm (23.5 x 29.75 in.)	SV50517.09
		200 L	60 x 114 cm (23.5 x 44.75 in.)	SV50517.10
		250 L	60 x 133.4 cm (23.5 x 52.5 in.)	SV50517.41
	Plastic drum dolly	50 L 100 L 200 L	62 x 18 cm (23.38 x 7.13 in.)	SV50029.03

Cylindrical tanks

Thermo Scientific™ cylindrical tanks are convenient, cost-effective containers for BPCs used for internal unit operations. Cylindrical tanks are not qualified as shipping containers.

Key features

- Low-cost option
- HDPE, LLDPE, and PP construction
- Top-drain access only for in-house use
- 19 L to 568 L options available

BPC options

- Standard BPCs available in CX5-14 and ASI 26/77 films
- Standard open-top tank liners available in CX3-9, and ASI 26 films



Cylindrical tank specifications

	Description	Size	Dimensions (D x H)	Cat. No.
		19 L	27.9 x 38.4 cm (11 x 15 in.)	SV30133
	Cylindrical, flat-bottom, HDPE tank with lid, top dispense	57 L	34.6 x 70.1 cm (13 x 27 in.)	SV30111
		114 L	49.7 x 75.9 cm (18 x 30 in.)	SV30112
		208 L	55.9 x 91.8 cm (22 x 36 in.)	SV30113
		303 L	60.8 x 122.1 cm (24 x 48 in.)	SV30114
		378 L	72.1 x 112.4 cm (28 x 44 in.)	SV30115
		568 L	80.3 x 125.3 cm (31 x 49 in.)	SV30116
	Plastic drum dolly	50, 100, 200 L	62 x 18 cm (23.38 x 7.13 in.)	SV50029.03

Square and rectangular plastic outer support containers

Thermo Scientific™ outer support containers are rigid plastic vessels to support BPCs in helping meet your needs for large-volume liquid storage, handling, and transportation.

Key features

- Robust design and sturdy HDPE/Acrylonitrile Butadiene Styrene (ABS), and PP construction permits multiple uses
- Collapsible walls fold down for easy storage when bins are not in use
- Stackable—enables extra storage when empty or full
- Bottom- and top-drain options are available
- Clean room units designed with smoother surfaces to help simplify clean-in-place operations
- Qualified for transportation

BPC options

- Standard BPCs available in CX5-14 and Aegis5-14 films
- Custom BPCs available in ASI 26/77 film

Plastic rigid outer support containers



Size	Outer dimensions (W x D x H)	Dispensing and material	Cat. No.
250 L	80.9 x 60.9 x 96.5 cm (31.8 x 23.9 x 38 in.)	Top and bottom, PP	SV50139.15
500 L	120 x 80 x 104 cm (47.2 x 31.5 x 41 in.)	Top and bottom, ABS/HDPE	SV50139.12
600 L	115.5 x 115.5 x 98 cm (45.5 x 45.5 x 38.6 in.)	Top and bottom, PP	SV50139.11
1,000 L	115.5 x 115.5 x 129.4 cm (45.5 x 45.5 x 50.9 in.)	Top and bottom, PP	SV50139.06
Stainless steel carts			
250 L	81.6 x 61.6 (24.25 x 32.125 in.)	Stainless steel	SV50139.17
500 L	122.0 x 81.0 cm (48 x 32.25 in.)	Stainless steel	SV50139.13
600 L 1,000 L	116.2 x 116.2 cm (45.75 x 45.75 in.)	Stainless steel	SV50139.16

HyPerforma Smartainer 3.0 systems

HyPerforma Smartainer 3.0 systems are stainless steel support containers used for in-house, large-volume, liquid-handling operations. The 3.0 systems have an updated design and offer multiple sizes up to 3,000 L.

Key features

- Containers constructed with 304 stainless steel
- Designed to allow bottom draining from Thermo Scientific™ BPCs
- Modular system with optional accessories for increased mobility and BPC handling
- Non-jacketed outer container systems are available in unit volumes of 200, 500, 1,000, 1,500, 2,000, 2,500, and 3,000 L
- Jacketed versions are available in all sizes, for applications where heating or cooling are required



Specifications for the HyPerforma Smartainer stainless steel container

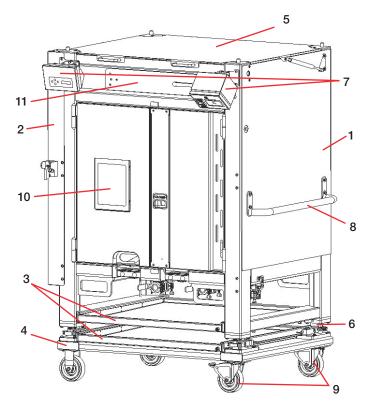
Size	Inner dimensions (L x W x H)	Outer dimensions (L x W x H)	HyPerforma Smartainer 3.0 system Cat. No.	
200 L	73.02 x 53.34 x 58.67 cm (28.75 x 21.0 x 23.1 in.)	83.18 x 63.5 x 106.04 cm (32.75 x 25.0 x 41.75 in.)	Non-jacketed	SBN0200.7001
		83.82 x 64.01 x 106.04 cm (33.0 x 25.2 x 41.75 in.)	Jacketed	SBN0200.7002
500 L	114.3 x 73.66 x 88.64 cm (45.0 x 29.0 x 34.9 in.)	124.46 x 83.82 x 125.73 cm (49 x 33.0 x 49.5 in.)	Non-jacketed	SBN0500.7001
		125.22 x 84.07 x 125.73 cm (49.3 x 33.1 x 49.5 in.)	Jacketed	SBN0500.7002
1,000 L	114.3 x 91.44 x 126.74 cm (45.0 x 36.0 x 49.9 in.)	124.46 x 101.6 x 163.83 cm (49.0 x 40.0 x 64.5 in.)	Non-jacketed	SBN1000.7001
		125.22 x 101.85 x 163.83 cm (49.3 x 40.1 x 64.5 in.)	Jacketed	SBN1000.7002
1,500 L	114.3 x 91.44 x 179.83 cm (45.0 x 36.0 x 70.8 in.)	124.46 x 101.6 x 214.63 cm (49.0 x 40.0 x 84.5 in.)	Non-jacketed	SBN1500.7001
		125.22 x 101.85 x 214.63 cm (49.3 x 40.1 x 84.5 in.)	Jacketed	SBN1500.7002
2,000 L	114.3 x 19.44 x 233.42 cm (45.0 x 36.0 x 91.9 in.)	124.46 x 101.6 x 267.33 cm (49.0 x 40.0 x 105.25 in.)	Non-jacketed	SBN2000.7001
		125.22 x 101.85 x 267.33 cm (49.3 x 40.1 x 105.25 in.)	Jacketed	SBN2000.7002
2,500 L	129.54 x 120.65 x 212.59 cm (51.0 x 47.5 x 83.7 in.)	139.7 x 130.81 x 247.01 cm (55.0 x 51.5 x 97.25 in.)	Non-jacketed	SBN2500.7001
		140.46 x 131.06 x 247.01 cm (55.3 x 51.6 x 97.25 in.)	Jacketed	SBN2500.7002
3,000 L	129.54 x 120.65 x 212.59 cm (51 x 47.5 x 97.7 in.)	139.7 x 130.81 x 282.57 cm (55.0 x 51.5 x 111.25 in.)	Non-jacketed	SBN3000.7001
		140.46 x 131.06 x 282.57 cm (55.3 x 51.6 x 111.25 in.)	Jacketed	SBN3000.7002

Note: Dimensions are provided for estimates only. Actual outer dimensions will vary depending on configuration selected.

HyPerforma Smartainer 3.0 system components

- Jacketed or non-jacketed HyPerforma Smartainer
 system—supports BPCs by design.
- 2. BPC hoist—for handling and loading BPCs. Optional for the 500 L system, available options include a manual or pneumatic hoist (shown below) for the 1,000 L system, and pneumatic hoist only for larger sizes.
- 3. Tray assembly—holds dispense pumps, tube welders, and other items for convenient storage and access. It can be located on the cart or at the base of the HyPerforma Smartainer 3.0 system.
- 4. Cart—for moving empty HyPerforma Smartainer 3.0 systems over smooth and level surfaces within or between in-house storage or clean room areas. Available for vessels up to 1,000 L.
- Lid—stainless steel lid, which help ensure protection of the BPC against light and physical damage. Options include insulated lid with pneumatic lift assist and noninsulated lid.
- Load cells—integrated load cells on all sizes, which provide weight measurements for liquid inside the container.
- 7. **Display location**—load cell and temperature transmitters can be mounted on the left or right side of the HyPerforma Smartainer 3.0 system.
- 8. Handle—available on either the left or right side for vessels with a cart or casters, up to 1,000 L. Recommended for mobile units.
- **9. Casters**—option available to mount units up to 1,000 L directly onto casters.
- Document holder—for easy access to process control or production documents.
- **11. Top port access cover**—helps ensure light protection and access to ports.

Note: Components above vary based on selected configuration.



1,000 L HyPerforma Smartainer 3.0 system

BPC options

- Catalog BPC configurations are available in unit volumes of 200, 500, 1,000, 1,500, 2,000, 2,500, and 3,000 L
- BPCs are constructed from Aegis5-14, CX5-14, and ASI 26/77 film with dimensions optimized for HyPerforma Smartainer systems

HyPerforma Smartainer BPC ordering information

Size	Cat. No.			
	Aegis5-14	CX5-14	ASI 26/77	
200 L (horizontal gusseted)	SH31188.01	SH31058.01	SS00195-I	
500 L (horizontal gusseted)	SH31188.02	SH31058.02	SS00196-I	
500 L (vertical gusseted)	SH31188.03	SH31058.03	SS00197-I	
1,000 L	SH31188.04	SH31058.04	SS00198-I	
1,500 L	SH31188.05	SH31058.05	SS00199-I	
2,000 L	SH31188.06	SH31058.06	SS00200-I	
2,500 L	SH31188.07	SH31058.07	SS00201-I	
3,000 L	SH31188.08	SH31058.08	SS00202-I	

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Nalgene bottles and carboys

The Thermo Scientific™ Nalgene™ multitiered storage portfolio enables you to choose the appropriate product quality for your application. The tiered portfolio offers customers benefits from:

- Low particulates—USP <788> compliance reduces the chance of contamination, decreasing potential loss of high-value contents
- Improved packaging—triple-layer packaging facilitates ease of entry into clean room environments
- Sterile and ready-to-use containers—reduced need for validation, washing, packaging, and sterilization saves resources

Bottles and carboys

Designed specifically for the storage and transport of active pharmaceutical ingredients and bulk intermediates, Thermo Scientific™ Nalgene™ production bottles and carboys offer leakproof storage for sensitive liquids, buffers, media, and more.*

They are available in PC, PETG, PP, LDPE and HDPE, and in volumes ranging from 30 mL to 50 L. Extensive regulatory documentation helps assure that the products meet your demanding biotechnology requirements and reduces the time and cost to implement them in your process.



Closed-dome polypropylene tanks

Thermo Scientific™ Nalgene™ Closed-Dome Polypropylene Tanks are designed to store, mix, and disperse reagents in a closed containment system. Offered in sizes ranging from 75 to 380 L, tanks feature a 150 mm neck opening fitted with a gasketed closure for secure sealing.

Key features

- Tanks may be fitted with spigots
- Autoclavable polypropylene tanks and closures



^{*} Our guarantee for a leakproof seal is subject to our standard product warranty, as set forth in the Thermo Fisher Scientific Terms and Conditions of Sale. Our products are leakproof at ambient temperature and pressure when used with their corresponding closures. However, to ensure safe usage, customers are advised to test our containers and closures under conditions of their planned applications. Please contact technicalsupport@thermofisher.com if you need additional information about our products.