Storage and transport containers

Cylindrical and square, plastic and stainless steel solutions to fit all your needs
Storage and transport solutions

Thermo Scientific™ single-use systems are commonly used to store and transport process liquids, buffers, culture media, and bulk drug precursors. All 3D Thermo Scientific™ BioProcess Container (BPC) systems 50 L or more require an outer support container.

Our portfolio of rigid support containers is designed to hold BPCs and tank liners for internal or transportation needs. Outer support containers are available that can support both functions, and options for short- or long-term uses for critical or noncritical applications.

Our portfolio of reusable support containers accommodates a range of functionalities and chamber dimensions. The interaction between the BPC and the outer container system is important in simple liquid-handling applications, where the BPC system is not shipped, and becomes even more critical when transportation takes place. We offer plastic and stainless steel options to suit your storage and transport needs.

- **Plastic**—useful for internal and transportation applications. Top drain only and top- and bottom-drain, high-density polyethylene cylindrical drums from 50 to 300 L as well as square or rectangular polypropylene containers from 200 to 1,000 L are available. Regular and cylindrical tanks are also available in HDPE, LLPDE, and PP in sizes ranging from 75 L to 757 L.

- **Stainless steel**—Thermo Scientific™ HyPerforma™ Smartainer™ systems, with a range from 200 to 2,000 L. These containers are used for in-house, large-volume liquid-handling operations.

**Outer support containers fulfill two primary needs**

- **In-process/internal unit operations**—We offer a range of products such as HyPerforma Smartainer systems, ALLpaQ™ totes, Thermo Scientific™ drums and industry-standard cylindrical tanks to take care of your storage and collection, process liquid preparation and storage, and waste collection needs.

- **Transport**—large-volume liquid shipping including ALLpaQ totes and Thermo Scientific drums.

**Selecting BPCs and the correct support containers**

There are multiple design considerations depending on your 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**—consider clean room-ready containers for clean room operations
Cylindrical drums

Thermo Scientific drums provide a qualified shipping system for Thermo Scientific BioProcess Containers.

**Key features of drums**

- Bottom and top drain options are available with a locking lid
- Multi-use for shipping and storage applications
- Rugged LLDPE construction
- Ergonomic design for ease of use
- Matching dolly available for mobility
- 50 L to 200 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 CX3-9 and ASI 26 films
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 of cylindrical tanks**
- Low-cost option
- HDPE, LLDPE, and PP construction
- Top drain access only for in-house use
- Sizes up to 378 L available with factory-installed spigots
- 19 L to 757 L options available

**BPC options**
- Standard BPCs available in Aegis5-14, CX5-14, and ASI 26/77 films
- Standard open-top tank liners available in Aegis5-14, CX3-9, and ASI 26 films
ALLpaQ™ Genesis™ and Cleanroom containers are rigid plastic vessels to support our BPC products in helping meet your large-volume liquid storage, handling, and shipping needs.

Key features
- HDPE/ABS, and olypropylene robust design and sturdy 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
- Genesis units will qualify for shipping with correct dunnage and pack outs
- Cleanroom units designed for in-house clean room applications

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

HyPerforma Smartainer™ systems are durable stainless steel support containers used for in-house large-volume liquid handling operations.

**Key features**

- Containers constructed with 304 stainless steel
- Designed to allow both top and bottom drain from BPCs
- Modular system with optional accessories for mobility and BPC handling
- Non-jacketed outer container systems are available in unit volumes of 200, 500, 1,000, 1,500, and 2,000 L.
- Jacketed versions are available in all sizes on a custom basis, for applications where heating or cooling are required.

**BPC options**

- Catalog BPC configurations are available in unit volumes of 100, 200, 500, 1,000, 1,500, and 2,000 L
- Standard BPCs available in CX5-14 and Aegis5-14 films
- Custom BPCs available in ASI 26/77 film

**Smartainer and jacketed Smartainer system components**

1. Smartainer or jacketed Smartainer system
   - Supports BPCs by design

2. BPC hoist (optional)
   - Reduces hassle when handling and loading BPCs

3. Tray assembly (optional)
   - Holds dispense pumps, tube welders, and other items for convenient storage and access

4. Cart (optional)
   - Helps move Smartainer systems over smooth and level surfaces for short distances
The Thermo Scientific™ Nalgene™ multi-tiered 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.

Find out more at thermofisher.com/intermediatestorage
Let’s move forward, together

Thermo Fisher Scientific is that partner. We believe in the promise of biologics and your mission to bring them to market. As a pioneer in the industry, we’ve benefited from working hand-in-hand with customers, as we excel as both an innovative supplier and a custom manufacturer.

Our diverse roots bringing together world-class solutions in an integrated, end-to-end bioprocessing workflow, while our global scale enables us to better serve our customers. Learn more at thermofisher.com/bpd

**Single-use technologies**  
Flexible and rigid solutions with an open architecture approach

**Cell culture**  
Worldwide recognition for superior quality and consistent results

**Chemicals and supply chain logistics**  
Built to be an extension of your supply chain

**Purification**  
Solutions for even the most complex molecules

**Measurement and control**  
Integrated intelligence and plug-and-play flexibility

**Analytical and QC testing**  
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