

Celsius® FFT: Safeguarding Your Drug Substances in Conventional Freeze & Thaw Manufacturing

- Maximum Product Security
- Simple, Easy-to-Use
- Improves Process Efficiency
- Creates Process Flexibility

Celsius® FFT

Celsius® FFT (Flexible Freeze and Thaw) are sterile, pre-assembled, single-use containers for freezing & thawing biopharmaceutical solutions in commercially available equipment.

Celsius® FFT is a unique bag-in-shell system that replaces traditional freezing and thawing methods.

Celsius® FFT provides exceptional robustness and confidence when handling the frozen container. Purpose-designed Shippers further maximize mechanical and thermal protection during transportation.





Maximum Product Security

Safeguards BDS throughout lifecycle

Same quality but thicker Flexboy® S71 film plus unique thermo-formed shell protects your bulk drug substances at low temps; proven in real & extreme process conditions

Confident handling

Contoured shell protects tubing, connectors and bag ports, and ensures confident handling when frozen

Pre-qualified shippers

Purpose-designed single-use shippers pass rigorous robustness test program and provide excellent thermal performance of > 96 hours at below -40°C



Improves Process Efficiency

Stackable

Ribbed shell corners provide stable stacking; stack FFT up to 5-high for efficient use of freezer space

One-way logistics

Purpose-designed shipper is constructed of recyclable materials and uses dry ice to allow efficient disposal after use

One supplier

Bag, shell and shipper all provided by Sartorius for single-point accountability and process expertise



Simple, Easy-to-Use

Closed system processing

100% bag chamber leak test, pre-assembled shell and connectors, and gamma-sterilized ensure successful aseptic processing, every time

Easy-to-use

Container design and tubing configurations promote easy, confident operations for operator

Consistent

Shell design provides spacing and vents between stacked FFT for consistent heat transfer to each unit and ensures batch-to-batch consistency

Creates Process Flexibility

Easy implementation

Drop-in replacement to bottles | carboys and uses existing freezers and thawing methods

Configurable

FFT can be configured to fit to process needs and can be designed into manifolds

Scalable

Product range up to 12L fill volumes; common film to Celsius®-Paks for efficient process development and samples in 30mL Celsius®-Paks

 Find out more:
www.sartorius.com