



# Lifecube FTT Containers

## Flexible Freeze-Thaw Series



# Lifecube FTT Containers

Lifecube FTT meet the needs for high efficiency, sterility and stability of freezing operations in the biopharmaceutical industry. Lifecube FTT is available with three different freeze-thaw solutions, allowing customers to choose the one that best suits their needs.

## Features

### Stackable

Lifecube FTT can be stacked in multiple units to significantly reduce the space required for freeze storage and the related operating costs.

### Flexible fluid management technology

Lifecube FTT is a single-use freeze-thaw bag with a wide range of filling sizes and couplings for rapid transfer of drug substance.

### Validation

Cobetter offers three customisable freeze-thaw solutions, each of which has been tested with the appropriate transport validation to cover a wide range of possible transport scenarios and environments. Whether for in-plant transfers or long-distance transport, a solution can be found to ensure the safety of the drug substance during transport.

### Easy to clean and maintain

The surface is easy to clean and the internal design prevents condensation build-up, effectively avoiding frost formation and resulting contamination issues.

## Validation of performance

- Transport Testing
- Stacking Test
- Drop Test
- -80°C Freezing Test

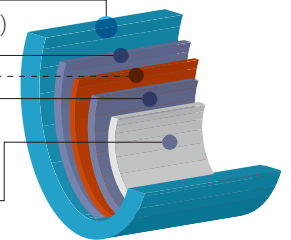


# Lifecube FT Single use Freeze-Thaw Bags

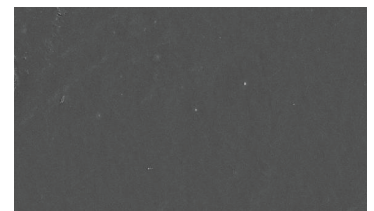
- Single-use freeze-thaw bag
- The bag and tube are completely protected and fixed.
- -80°C temperature conditions for use
- Up to four units can be stacked
- 360µm **Topeva SA** film with blown film process, the inner surface is extremely clean, and the film has good extension properties and freeze resistance
- Low temperature transport solution
- Supporting TPE or silicone tubes, and aseptic metallic sleeves.
- ISTA-3A drop test and simulated manual handling drop test under frozen condition
- 100% leak test
- Aseptic connection version is available (Customized)

## Topeva SA EVA film structure

Fluid contact layer, Ethylene vinyl acetate copolymer (EVA)  
 Bonding layer (Tie)  
 Gas barrier layer, ethylene vinyl alcohol (EVOH)  
 Outer layer, low density polyethylene (LDPE)



## Topeva SA Scanning electron micrograph of 11-layer film



| Nominal Volume | Code      | Tubing  | Dimensions (LxWxH) mm | Working Volume |
|----------------|-----------|---|-----------------------|----------------|
| 2 L            | FT02LF2CK | Tube 1: 35 cm ID%*OD%* STF TPE Tubing + ECS Easy Connector (Male Coupling Bodies) + ECS Female Sealing Cap<br>Tube 2: 35 cm ID%*OD%* STF TPE Tubing + ECS Easy Connector (Male Coupling Bodies) + ECS Female Sealing Cap<br>Sampling: 3/16" Female Luer Lock + Male Luer Plug | 430x360x122           | 1 - 2 L        |
|                | FT02LF2CQ | Tube 1: 35 cm ID%*OD%* STF TPE Tubing + AC Single-Use Aseptic Connector<br>Tube 2: 35 cm ID%*OD%* STF TPE Tubing + AC Single-Use Aseptic Connector<br>Sampling: 3/16" Female Luer Lock + Male Luer Plug   |                       |                |
| 6 L            | FT06LF2CK | Tube 1: 50 cm ID%*OD%* STF TPE Tubing + ECS Easy Connector (Male Coupling Bodies) + ECS Female Sealing Cap<br>Tube 2: 50 cm ID%*OD%* STF TPE Tubing + ECS Easy Connector (Male Coupling Bodies) + ECS Female Sealing Cap<br>Sampling: 3/16" Female Luer Lock + Male Luer Plug | 605x480x128           | 3 - 6 L        |
|                | FT06LF2CQ | Tube1: 50 cm ID%*OD%* STF TPE Tubing + AC Single-Use Aseptic Connector<br>Tube 2: 50 cm ID%*OD%* STF TPE Tubing + AC Single-Use Aseptic Connector<br>Sampling: 3/16" Female Luer Lock + Male Luer Plug  |                       |                |
| 12 L           | FT12LF2CK | Tube1: 65 cm ID%*OD%* STF TPE Tubing + ECS Easy Connector (Male Coupling Bodies) + ECS Female Sealing Cap<br>Tube2: 65 cm ID%*OD%* STF TPE Tubing + ECS Easy Connector (Male Coupling Bodies) + ECS Female Sealing Cap<br>Sampling: 3/16" Female Luer Lock + Male Luer Plug   | 690x530x130           | 6 - 12 L       |
|                | FT12LF2CQ | Tube1: 65 cm ID%*OD%* STF TPE Tubing + AC Single-Use Aseptic Connector<br>Tube2: 65 cm ID%*OD%* STF TPE Tubing + AC Single-Use Aseptic Connector<br>Sampling: 3/16" Female Luer Lock + Male Luer Plug   |                       |                |
| 30 mL          | FT003X2CX | Tube1: 8 cm EVA Tubing + 1/4" Female Luer Lock + Male Luer Plug<br>Tube2: 8 cm EVA Tubing + 1/4" Female Luer Lock + Male Luer Plug  |                       | 24-30 mL       |
| 100 mL         | FT010X2CX | Tube1: 8 cm EVA Tubing + 1/4" Female Luer Lock + Male Luer Plug<br>Tube2: 8 cm EVA Tubing + 1/4" Female Luer Lock + Male Luer Plug  |                       | 50-100 mL      |

Note: 2L/6L/12L are integrated freeze-thaw bags, including the bag body and protective shell.

## Lifecube FTT Freezer Frames

- Integral cushioning design
- Cushioning foam for wrapped film: easy to clean and no water accumulation
- Tubing has a fixed location
- Stacked non-slip structure



| Materials | Code           | Nominal Volume | Max. Working Volume | Dimensions (LxWxH) | Operating Temperature Range |
|-----------|----------------|----------------|---------------------|--------------------|-----------------------------|
| HDPE      | <b>FTT10LB</b> | 10 L           | 8 L                 | 680 × 555 × 147 mm | -80°C~40°C                  |
|           | <b>FTT20LB</b> | 20 L           | 16 L                | 820 × 665 × 167 mm |                             |

## Lifecube FTT Freezer Trays

- Single-use bags are placed in freezer trays to ease handling.
- Three units can be stacked to increase cold storage utilisation.
- Reduces bag impact during handling



| Materials | Code           | Nominal Volume | Max. Working Volume | Dimensions (LxWxH)  | Operating Temperature Range |
|-----------|----------------|----------------|---------------------|---------------------|-----------------------------|
| HDPE      | <b>FTT10LA</b> | 10 L           | 8 L                 | 708 × 458 × 155 mm  | -80°C~40°C                  |
|           | <b>FTT20LA</b> | 20 L           | 16 L                | 860 × 580 × 155 mm  |                             |
|           | <b>FTT50LA</b> | 50 L           | 40 L                | 1060 × 660 × 155 mm |                             |

## Lifecube FTT Freezing Tray Cover

| Part No.           | Suitable size | Application            |
|--------------------|---------------|------------------------|
| <b>FTT10LA-LID</b> | 10L           | Light Protection Cover |
| <b>FTT20LA-LID</b> | 20L           |                        |
| <b>FTT50LA-LID</b> | 50L           |                        |

