



Gamma Beam Sterilized Liquid Transportation / Storage Container

# Steritainer+ PLUS™

3D Single Use Sterile Bag

**Gamma Beam Sterilized**

High Penetrating Power and Stable Sterility

**Blow Integral Molding**

Realized High Level Durability and Low Elution Performance

**Validation**

High Reliability and Quality Control, Operable Right Now

Conforming to Japanese Pharmacopoeia (JP) / US Pharmacopoeia (USP Class VI)

# 10-6

## Culture

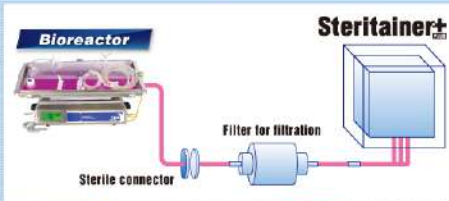
Adherent Cell Culture / Suspension Cell Culture

Case of Steritainer Plus Customization

## Space saving realized for a culture process

### Case WAVE Bioreactor

Cells are grown using a WAVE Bioreactor, and the desire is to save space in supplying culture media without the risk of contamination.



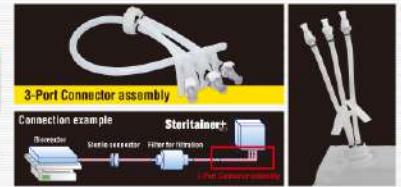
**Adherent Cell Culture also supported**



Reducing the risk of contamination in filling and discharging

**Solved Various Forms of Connection in a Closed System Possible**

Steritainer Plus, having already passed sterility validation, can reduce the risk of contamination in filling and discharging by using the optional 3-Port Connector and 3-Port Connector assembly.



Using clean areas efficiently

**Solved Space Saved thanks to 3D**

Thanks to the 3D shape, Steritainer Plus can be installed on a desk as well. It can be transported easily in a storage container.



Contributing to work efficiency improvement

**Solved Workload Reduced Significantly through One Hand Operation**

A rack for flipping the container upside down is used for discharging without a workload and without leaving residual liquid.



**More** In addition to a 100% automatic leak test, strict visual inspection is conducted. Assured quality is delivered.



By connecting the 3D shape Steritainer+ to a WAVE Bioreactor, Space Saving and Single Use can be realized in surrounding areas for such operation as supply to and discharge from the reactor.

An example	
Supply	Culture media
Discharge	Culture solution, culture media waste liquid



# Steritainer+ PLUS™

3D Single Use Sterile Bag

3D Single Use Sterile Bag, best suited for the storage and transportation of medical products requiring a sterile environment in a container



## Gamma Beam Sterilized

3D Single Use Sterile Bag is already gamma beam sterilized and ready for use immediately after being brought out of the box. This Single Use Bag is best suited for a wide range of applications for biomedicines, such as preparation, storage, and transportation of liquids.



Chemical indicator

## Space Saving

Installation is possible in a small space such as inside a sterile chamber. Empty containers are folded, wrapped individually, and packaged compactly. Storage space can be saved!



## High-Strength Design Adjustment

Since the main body of Steritainer itself stands on its own, a solution can be stirred without relocating it to a glass container. The cube shape realizes higher dissolution efficiency for stirring a solution and makes it possible to adjust a powder medium in a short time.



Magnetic stirrer

Product size

**5L** 190 × 190 × H190mm

**10L** 230 × 230 × H230mm

**20L** 285 × 285 × H285mm

## Adjustment

Stirring / Adjustment

## Single Use for Adjustment Work Realized

**Case** It is desired to realize single use for work using a magnetic stirrer, such as additive adjustment for a solution medium and dissolution for a powder medium.

It takes time to do preparation work such as washing and sterilizing a container, adjustment cannot be performed immediately.

Single Use is desired. However, it is also desired to continue to do the work using a magnetic stirrer.

It is desired to realize Single Use also for powder media dissolution work.

**More**

The dissolution status can be checked from the transparent area.

**Solved** No Advance Preparation Required thanks to the Sterilized State

Steritainer Plus is already gamma beam sterilized. No advance preparation is required. The product can be used immediately after the product package is opened.



**Solved** Stirrer Supported due to the 3D shape



A container alone can stand on its own, so adjustment using a stirrer is possible. Moreover, because of its square shape, this container is distinctive in that turbulent flows are likely to occur, which makes the stirring efficiency good.

**Solved** Powder Loading Supportable



By using a commercially available powder funnel, powder can also be loaded easily into the cap-type opening section.



## Storage and Transportation

Storage / Transportation at Constant Temperature

## Optimization of the Storage and Transportation of Sterilized Liquid Products Realized

**Case** A 5-liter test sample is prepared for 500 ml bottles through divided injection, and bottles are sterilized, filled, and sent to the outsourcing contractor. However, it is troublesome and there is also a concern about contamination at the time of discharge on the outsourcing contractor side.

It takes time to sterilize and fill containers.

There is a concern about contamination at the time of filling or discharging.

Double boxing for preventing damage during transportation is troublesome.

**More** Frozen Storage / Refrigerated Transportation Supported

Frozen storage at a temperature of -80°C and refrigerated transportation at a temperature of -40°C\* also supported

**Solved** Filling Time Shortened by Large Capacity

Steritainer Plus can be used immediately because it is already sterilized. Large capacity makes it possible to shorten the filling time.



**Solved** 3-Port Connector Assembly



The risk of contamination in filling and discharging can be eliminated by using optional 3-Port Connector assembly.

**Solved** No Double Boxing Thanks to High-Strength Design



Steritainer Plus also passed a vibration test for land transportation over a distance of 1000 km or more. High-strength design is realized by blow molding. No cushion material is required. Steritainer Plus put in an armored container as-is can be transported.



Even if frozen at a low temperature of -18°C and falls (2 m), the bag neither loses its flexibility nor breaks.

Steritainer Plus can be stored as-is in a box for transportation at a constant temperature.

\*Supported product: 5-liter type

**Case** A 10-liter bottle or 2D bag is used for temporarily storage of a culture medium, buffer, intermediate, and others. However, since the worksite is not spacious, more efficient storage and transport in the worksite are desired.

It is desired to use the limited space in the refrigerator efficiently.

**Solved** Dedicated Container



By using an armored storage container RIC (optional), thanks to its 3D shape, space saving storage is possible.

Dedicated racks and transport equipment are expensive and require much space.

**Solved** Special Transport Equipment Not Required



For storage and transport in the worksite, special transport equipment is not required. The carriages and racks currently in use can be used as-is.

**More**

If Not Used, Containers can be stored compactly.

