

## Sterile Bovine Serum

### 1. GENERAL INFORMATION

**Product code:** BOO-500, BOI-500, BON-500

**Packaging:** Sterile PET Bottle 500 ml

**Collected from the source:**

- Our vertical production system allows us to be certain of the origins and traceability of our products. Each batch manufactured is rigorously controlled from blood collection, in all stages of production, up to the final packaging in our facilities. The Bio Nutrients Sterile Bovine Serum is derived from coagulated whole blood collected from bovines.

**Sterility:** Sterile.

**Filtration:** Final filter size (pores): 0.2 µm.

### 2. QUALITY CONTROL

**Bacteria/Fungi:** All serums are tested for the absence of aerobic and anaerobic bacteria, fungi, and yeast.

**Hemoglobin:** The hemoglobin level is measured by spectrophotometry.

**pH:** Determined by potentiometry.

**Protein:** Determined by Refractometry.

**Shelf life:** 5 years.

### 3. TRANSPORTATION CONDITIONS

- Serum is transported frozen and, upon receipt, must be immediately stored at the temperature indicated by the manufacturer. If partial thawing occurs during transport or upon arrival at the destination, the product may be immediately refrozen, provided that the integrity of the packaging is not compromised, and must be kept back at the recommended temperature without affecting its quality.


### 4. STORAGE CONDITIONS

- Store between -18°C and -40°C to ensure the indicated shelf life;
- Store the serum in an area protected from light.

### 5. RECOMMENDATIONS FOR USE

#### 5.1 General Recommendations

- Respect the serum storage conditions;
- Do not use the serum after the expiration date;

	<b>Technical Data Sheet</b>	Ref.: FT-02 Page: 2/2
	<b>Sterile Bovine Serum</b>	Version: 04

- Handle the serum under aseptic conditions (e.g., under laminar airflow);
- Use appropriate clothing for handling serum to avoid contamination (e.g., gloves, masks, cap);
- The product should only be used for in vitro research or further manufacturing, and not for use as an Active Pharmaceutical Ingredient or human/animal feed.

## 5.2 Thawing

- To preserve all serum qualities, it is recommended to thaw the bottle in a refrigerator between +2°C and +8°C, avoiding product degradation. During the thawing process, gently and periodically agitate to resuspend the contents. It is not recommended to use an oven or water bath for thawing, in order to prevent changes in quality;
- Temperatures above 37°C can compromise serum performance by accelerating the degradation of critical serum factors. To ensure the integrity of the product, these conditions must be strictly avoided during product handling.

## 5.3 Aliquoting

- To preserve the characteristics of the serum, it is recommended to thaw the original bottle, perform aliquoting, and then refreeze the produced aliquots, avoiding repeated thawing and freezing cycles of the same bottle.

## 5.4 Storage after thawing

- It is recommended to use the serum immediately after thawing. If this is not possible, the product can be stored between +2°C and +8°C for up to 26 weeks, without significant impact on cell culture performance;
- Thawed serum should be homogenized before being added to the cell culture medium.

## 5.5 Normal variations during handling

- Turbidity and flocculant material may be present after thawing or after prolonged freezing and/or refrigeration. These changes do not affect the biological performance of the serum.

## 6. TREATMENT

The Serum can be treated (Inactivated or Irradiated) according to the client's request. To request any type of treatment, please contact Bio Nutrientes.