



# Directions for use

# Sartoclear® F&B Sheets

For Food & Beverage Applications Only

# 1. Introduction

The purpose of this document is to outline the appropriate method for identifying, installing and using a Sartorius Stedim Biotech Sartoclear® F&B Sheets.

Sartoclear® F&B sheets are intended to be used for the clarification fluids in the Foods & Beverages Industries, e.g. wines and beers. The use of this product for other applications or in an other manner as described in this manual may result in personal injury and malfunction of the filter. This document must be read in full and stored. Always follow the directions for use.

# 2. Identification

This document pertains to Sartorius Stedim Biotech Sartoclear® F&B filter sheets with the following article numbers:

40 x 40 cm sheets 290S7-040040FN 290S5-040040FN 290S3-040040FN 290F7-040040FN 290F4-040040FN 290C8-040040FN 290C3-040040FN

60 x 60 cm sheets 290S7-060060FK 290S5-060060FK 290S3-060060FK 290F7-060060FK 290F4-060060FK 290C8-060060FK 290C3-060060FK

#### 3. Installation

During unpacking and installation it is recommended to wear gloves in order to prevent contamination of the sheets. Please verify that the correct depth filter grade is taken for the application.

#### Note

Do not use cracked of broken depth filter sheets.

Insert the sheets with the smooth side facing the filtrate frame in the downstream direction. The rough side of the filter sheet should face the plate in the upstream direction. Please make sure that all edge sealing's cover the edges of the filter sheets. When all the filter sheets are properly sealed the filter unit may be clamped to approximately 50% of its maximal clamping strength In this manner there is room left for swelling of the sheets due to wetting which secures a proper sealing. The wetting can now be started with the outlet slightly closed so that a backpressure of approximately 20 kPa is created. After 5 minutes of wetting the filter sheets are swollen and the filter unit can be closed completely.

# 4. Pre-rinsing of the Sartoclear® F&B sheets

Prior to use, Sartoclear® F&B depth filter sheets must be pre-rinsed or flushed with at least 100 l/m² of WFI or buffer in the direction of filtration. The flushing flow rate should be 1,25 times the flow of filtration. In case of a required steam sterilization it is recommended to flush again prior starting the filtration.

# 5. Sterilization | Sanitization

The filter press and filters may be sterilized by steam sterilization or by using a hot water flush.

# 5.1 Steam sterilization

The filtration system can be sterilized with steam of up to 134°C (273°F) at a saturated steam pressure of 200 kPa (29 Psi). Before applying steam to the filter pack it is important to loosen the tightened filter pack and slightly open all the vent and drain valves. In this way the steam penetration is optimized and steam shocks will be prevented.

#### Note:

Please, take care of using particle free steam. The end user is responsible for the effectiveness of the applied steam sterilization procedure in the used equipment.

#### Note:

Re-tighten the filter press after the system completely cooled down.

### 5.2. Hot water sanitization

For hot water sanitization it is recommended to use demineralised water which is free of particles. The max allowed temperature is 85°C. The recommended flush rate is 1,5 times the applied filtration speed. The hot water flux should last at least 30 minutes.

## Note:

Re-tighten the filter press after the system completely cooled down

# 6. Filtration

The maximum allowed differential pressure is 1,5 bar (21,75 psi)

# Note:

Constant flow is the preferred filtration mode, where the flow rate through the sheets is held constant during the entire filtration process.

# 7. Disposal

All components of the Sartoclear® F&B sheets are non-hazardous and can be disposed through normal waste removal methods, in accordance with the local legislation. The disposal method may depend on the nature of the residual material originating from the filtered material.

#### 8. Return of used Filter Elements

All used filter elements should be properly sterilized prior to shipping to Sartorius Stedim Biotech. This allows our staff to handle them with minimal risk during the inspection of the filter elements. The German law requires that a return shipment form (available through your local Sartorius Stedim Biotech representative) must be completed prior to shipping of used filter materials.

# 9. Liability

Sartorius Stedim Biotech can not assume liability if Sartoclear® F&B Sheets subjected to improper use. In the interest of product development we reserve the right to make changes. Thank you for working with Sartorius Stedim Biotech, we appreciate your business.

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