

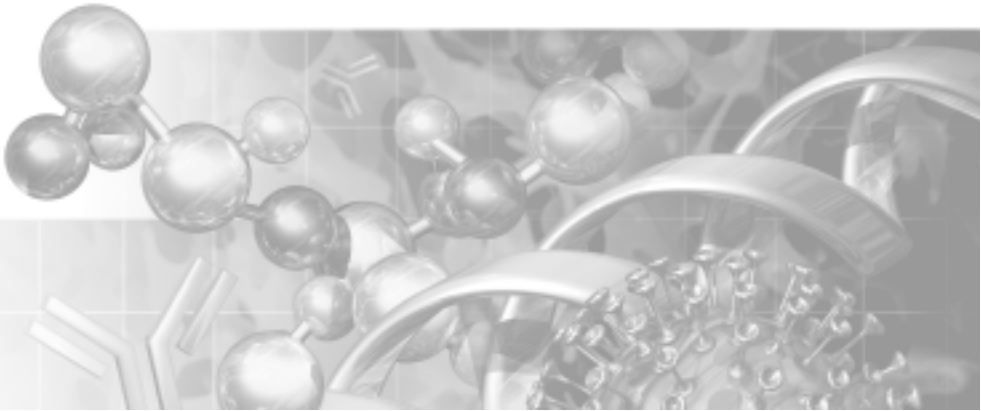


Life Sciences

## Instructions For Use (IFU)

USD 2659

### Pall Supra AKS Filters



*Filtration. Separation. Solution.<sup>SM</sup>*

## 1. Introduction

The following procedures must be followed for the installation of Pall Supra AKS cartridge filter cartridges.

These instructions and the information contained within the product datasheet must be read thoroughly as they contain valuable information gained by extensive experience. It is very important that all instructions are carefully followed. Where appropriate, they should be incorporated into the end user's standard operating procedures. If some of the procedures do not suit your needs, please consult Pall or your local distributor before finalizing your system.



*Use of this product in a manner other than in accordance with Pall's current recommendations may lead to injury or loss.*

Pall does not accept liability for such injury or loss.

## 2. Specifications

The maximum working pressure and temperature can vary between filter cartridge styles and filter media. Please check the datasheet and labelling for details or contact Pall or your local distributor.

Operation outside the specifications and with fluids incompatible with construction materials may cause personal injury and result in damage to the equipment. Incompatible fluids are fluids which chemically attack, soften, swell, stress attack or adversely affect the materials of construction. Please refer to Pall for exact limits.

## 3. Receipt of Equipment

- (a) Store the filter cartridge in clean, dry conditions between 0 °C and 30 °C without exposure to irradiation sources such as direct sunlight, and wherever practical in the packaging as delivered.
- (b) DO NOT remove from packaging until just before installation.
- (c) Check that the bag or packaging is undamaged prior to use.
- (d) Ensure that the type of filter cartridge selected is suitable for the application.
- (e) In addition to the part number, each filter cartridge is identified by a unique identification batch and a unique serial number.
- (f) The Supra AKS filter cartridges should be used within a period of 36 months after production as indicated on the label.

## 4. Installation and Operation

Pall Supra AKS filter cartridges are high-quality products manufactured to exacting standards. It is essential to take care when handling and installing them into suitable filter housings.

Before installation, it is essential to verify that the filter cartridge type selected is compatible with the fluid to be filtered and to follow the appropriate instructions listed below.

- (a) Open the plastic bag with scissors, taking care not to damage the filter cartridge inside.



*Avoid use of sharp blades or pointed instruments that could damage the filter cartridge and potentially damage the filter media. Do not open bag by forcing the filter cartridge through the sealed end, as this can generate particulate contaminants.*

- (b) To prevent accidental contamination of the filter cartridge, wherever practical wear gloves and retain the open plastic bag around the filter cartridge when fitting into the filter housing. Remove bag before closing the filter housing.
- (c) Ensure that O-rings are undamaged and correctly positioned in the grooves.

- (d) Check that the sealing surface on the filter housing is clean and undamaged.
- (e) To assist ease of fitting, it is strongly recommended that O-rings are lubricated by dipping the open end of the filter cartridge in a suitable liquid which is compatible with the fluid to be filtered. Water with the same quality as used for final rinsing of the installation is a satisfactory lubricant in many cases. For advice on other lubricants, please contact Pall.



*Note when installing double O-ring cartridges into housings: low boiling-point lubricants (e.g. ethyl or isopropyl alcohol) must not be used if the installed filter is to be subsequently exposed to temperatures above the boiling point of the lubricant. The high vapour pressures between the O-rings under these conditions can result in damage to the O-ring adaptor.*

- (f) Grip the outside of the filter cartridge as closely as possible to the open end.
- (g) Insert the filter cartridge with a gentle twisting motion to assist wetting of the surfaces. Gently ease into place.



*Warning:*  
*Do not attempt to force the cartridge into position.*

- (h) For filter cartridges with a bayonet lock fitting, finally twist the filter cartridge clockwise to engage the retaining lugs within the housing head.
- (i) Where applicable, fit retaining plate or springs over cartridges.
- (j) Depending on the application, rinsing with cold or warm water in a forward flow direction is recommended prior to putting the Supra AKS cartridge cartridges into operation. In special cases rinsing can be carried out with product or a product-compatible liquid. The recommended rinsing volume is 50 L/m<sup>2</sup> of filter area.

## 5. Sterilization

### 5.1 Steaming *in situ*



*Caution:*  
*Pall Supra AKS cartridges must not be subjected to in-line steam.*

### 5.2 Autoclaving



*Caution:*  
*Pall Supra AKS cartridges must not be autoclaved.*

### 5.3 Hot water sterilization

Supra AKS cartridges may be sanitized by rinsing with hot water (maximum temperature 80 °C). Contact Pall or your local distributor for further information.

## 6. European Directive 94/9/EC (ATEX) 'Equipment for Use in Potentially Explosive Atmospheres'

Pall Supra AKS cartridge comply with the ATEX directive when installed in a compliant Pall filter housing or assembly, but are not themselves required to be labelled with the ATEX marking. Under the terms of the directive, filter cartridges are not considered to be equipment which is capable of autonomous function, but may be thought of as components which are essential to the operation of the equipment. As such, the conformity of the filter cartridges has been assessed as an integral part of the overall assembly.

## 7. Filter Cartridge Replacement

Filter cartridges should be replaced in line with the GMP requirements of the process. Where filter cartridges are used for more than one manufacturing batch, replacements are recommended when the maximum allowable differential pressure has been reached (refer to appropriate Pall datasheet), if the flow rate has become unacceptable or if the adsorption capacity has been exhausted, whichever occurs first. Discard filter cartridge in accordance with local Health and Safety and Environmental procedures. No attempt should be made to clean disposable filter cartridges.

Further details are available from Pall.

## 8. Scientific and Laboratory Services

Pall operates a technical service to assist in the application of all filter products. This service is readily available to you and we welcome your questions so that we can help. In addition, a full network of technical representatives is available throughout the world.



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