

## EDS-Pak®

EDSPAK0A1

### Introduction

The EDS-Pak® polisher is an activated carbon-based cartridge.

It is designed to remove specific organic substances known as endocrine disruptors (EDs), such as phthalate esters, bisphenol A and nonylphenol.


It has been validated to produce 300 L of endocrine disruptor-free water when fed with Milli-Q® ultrapure water. Ultrapure water treated by an EDS-Pak is suitable for the preparation of buffers, blanks and standards, as well as to dilute samples, used in the analysis of endocrine disruptors.

Instructions are available as a self-guided wizard, directly on the Q-POD® dispenser display of the Milli-Q® IQ 7000. You can access them from the Consumables menu or the Maintenance menu. For more information, refer to the user manual or quick guide.



## Conditioning

- The EDS-Pak<sup>®</sup> polisher is manufactured, packed and shipped dry.
- Prior to installation, it is necessary to condition its activated carbon with high grade methanol (99.9+%).

 **Wear eye safety glasses, laboratory gloves and other appropriate safety equipment when working with methanol.**

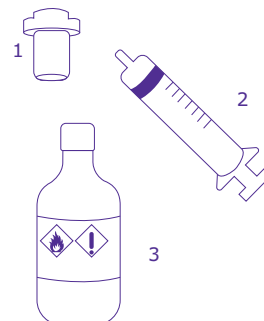
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### Step 1

Required material for EDS-Pak<sup>®</sup> conditioning:

1. Syringe adapter
2. Clean glass Luer slip tip syringe (50 mL) \*
3. 200 mL of high grade methanol \*

\* Purchased separately.



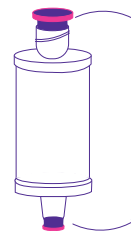
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### Step 2

- Remove the new EDS-Pak<sup>®</sup> from the package.
- Remove the Luer plugs at the inlet and outlet of the cartridge.

Note:

You may keep the outlet plug for later use when the system is not in use.



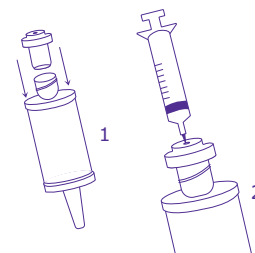
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### Step 3

1. Install the provided syringe adapter at the inlet of the new EDS-Pak<sup>®</sup>.
2. Fill the cartridge slowly with 50 mL of methanol using the glass syringe.

Note:

Use fresh methanol to avoid contamination. During conditioning, the activated carbon may become slightly warm.



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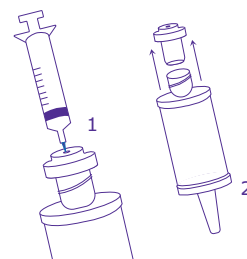
### Step 4

- Allow the methanol in the cartridge to soak for **30 minutes**.

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### Step 5

1. Flush the EDS-Pak<sup>®</sup> with 150 mL of methanol.
2. Discard the syringe adapter from the inlet of the cartridge when done. Immediately install the EDS-Pak<sup>®</sup> at the Milli-Q<sup>®</sup> point of dispense.



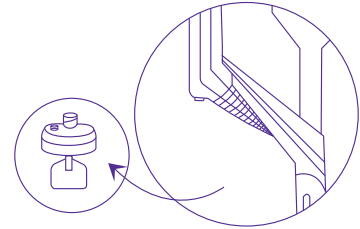
## Installation

- The EDS-Pak<sup>®</sup> cartridge has a Luer female inlet connection designed for direct connection to the outlet of Q-POD<sup>®</sup> remote dispenser of the Milli-Q<sup>®</sup> IQ 7000 system.

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### Step 6

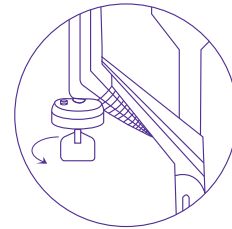
- Remove the expired final filter installed, if any.



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### Step 7

- Screw the EDS-Pak<sup>®</sup> cartridge into the point-of-use connection.



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### Step 8

**Rinse the EDS-Pak<sup>®</sup>** by flushing it with ultrapure water for at least 5 minutes:

- Press the dispense wheel to start rinsing.
- After 5 minutes (at least 10 L) of rinsing, press the dispense wheel again to complete the installation.

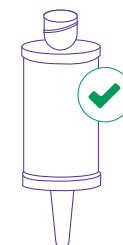


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### Step 9

- The EDS-Pak<sup>®</sup> installation is now complete. You can now dispense ultrapure water from the cartridge for your application.

Your EDS-Pak<sup>®</sup> certificate of quality is available on [mymilliqconsumables.com](http://mymilliqconsumables.com)



## Operation

Every day, discard the first liter of water produced by the water system to minimize environmental contamination from the water outlet.

The outlet Luer plug should be installed when the system is not operating.

To avoid airborne contamination of the cartridge, volatile organic solvents should be kept out of the laboratory area where the water purification system is installed.

## Multiple applications

Water purified through this cartridge may not be suitable for other applications.

For your Milli-Q® water to match several applications, you may connect up to 4 Q-POD® remote dispensers to your Milli-Q® production unit. Install your EDS-Pak® at the outlet of one Q-POD® dispenser and select amongst our range of POD-Paks the suitable ones for your other applications (visit [mymilliqconsumables.com](http://mymilliqconsumables.com))

## Maintenance

Scientific tests performed in our R&D laboratories have demonstrated that, once conditioned, the EDS-Pak® cartridge can deliver ED-free water for 300 liters when fed by ultrapure water from a Milli-Q® IQ 7000 water purification system.

Specifications	
Feed water	From a Milli-Q® IQ 7000 system (TOC<5 ppb)
Inlet connection	Luer female
Flow rate	Up to 2 L/min
Water temperature	5 – 30 °C
Maximum pressure	2 bar
Cartridge lifetime	300 liters

Material	
Housing including end-tip	Polypropylene
Internal disc	Polypropylene
Protection bell	Styrene AcryloNitrile (SAN)
Adsorbent	Activated carbon
Luer plug	Polyethylene

Ordering Information	
Description	Cat. No.
EDS-Pak® Polisher	EDSPAK0A1

Merck KGaA  
Frankfurter Strasse 250,  
64293 Darmstadt, Germany

