

20.04.2020

Dear Valued Customers,

With regard to the current COVID-19 pandemic, SAGES and EAES have issued guidance around possible viral contamination during laparoscopic procedures and recommend that, during desufflation after laparoscopic procedures, that “all escaping CO2 gas and smoke should be captured with an ultra-filtration system...” (<https://www.sages.org/recommendations-surgical-response-covid-19/>).

While KARL STORZ has not tested the efficiency of KARL STORZ smoke evacuation devices to meet the ULPA certification requirements or for filtering COVID-19 viruses, there is data on the efficiency with which KARL STORZ filters filter bacteria and other viruses.

The test results of KARL STORZ filters are summarized as follows:

KARL STORZ Single-Use Smoke Evacuation Filters:

The filter efficiency of KARL STORZ filters was tested using the most common test methods with microorganisms known as “Virus Filtration Efficiency (VFE)” and “Bacterial Filtration Efficiency (BFE)”. These types of tests are considered to be the most similar to clinical scenarios. A test aerosol with a mean particle size of 3 +/- 0.3 µm and a virus bacteriophage φX174 of 0.027 µm (at VFE) or bacteria *Staphylococcus aureus* (at BFE) were used. Test results confirmed a filter efficiency of more than 99.999 %.^{1,2}

For non-microbiological tests, the test aerosol DEHS (= Di-2-Ethylhexyl-Sebacat) with a size of 0.3 µm was used. A filter efficiency of more than 99.99 % was achieved.³

If you have any questions regarding the KARL STORZ smoke evacuation portfolio (see Annex), please contact your local representative.

Stay safe and healthy,

KARL STORZ

References:

1. Nelson Laboratories Inc., Salt Lake City, USA: “Virus Filtration Efficiency Test (VFE) at an Increased Challenge Level” Lab. No. 169548, 13 Sep. 2000 (internal reference: SAP ID 300000338072).
2. Nelson Laboratories Inc., Salt Lake City, USA: “Bacterial Filtration Efficiency Test (BFE) at an Increased Challenge Level” Lab. No. 169685, 13 Sep. 2000 (internal reference: SAP ID 300000338073).
3. GVS Filter Technology UK, Lancashire LA3 3EN, UK: Product Specification Mod. 984 Rev. 05, 23 Oct. 2019 (internal reference: SAP ID 300000338092).

ANNEX

The KARL STORZ Portfolio includes the following smoke evacuation products.

KARL STORZ Single-Use Smoke Evacuation Filters



031110-10

Smoke Evacuation Filter Set, with 50 cm tube with male LUER-Lock, sterile, for single use, package of 10, for use with trocars with LUER-Lock connectors



031111-10

Smoke Evacuation Filter, unsterile, for single use, package of 10

KARL STORZ Smoke Evacuation Management

The S-PILOT® is a modular solution for smoke evacuation management. The S-PILOT® can be used in combination with a third-party suction system or central suction. Please contact your local KARL STORZ representative for any questions.



UP501S1

S-PILOT®, including footswitch, power supply 100 - 240 VAC, 50/60 Hz, including:
S-PILOT®
One-Pedal Footswitch
SCB Connecting Cable, length 100 cm



031447-10

Tubing Set, for the suctioning of smoke, gas and fluid, with connector for second suction tube, sterile, for single use, package of 10, for use with KARL STORZ S-PILOT® (LAP)