

**NEWS RELEASE - For Immediate Release**

## **Pall's Metricel® Black PES Membrane Achieves Greater Accuracy and Recovery in Legionella Water Tests than Widely Used Filter Materials: Laboratory Studies**

**WESTBOROUGH, MASSACHUSETTS, December 9, 2020** — Pall Laboratory's Metricel Black polyethersulfone (PES) membrane achieved greater accuracy and recovery in *Legionella* water tests than other widely used filter materials, according to the results of independent laboratory studies. Pall Laboratory is a global leader in proven filtration, separation, and sample preparation solutions.

### **Legionella Testing to Surge**

*Legionella* is the leading cause of waterborne disease outbreaks in the US. Common sources of transmission include building heating and ventilation systems, cooling towers, potable water systems, and decorative fountains. Government regulations require a *Legionella* testing methodology reliably accomplished by culture in an accredited microbiology laboratory using well-characterized and validated methods. The membrane filter is a key component in the accuracy of the test. However, previous inter-laboratory studies suggested that different membrane materials offer varying levels of recovery performance.

"Due to the COVID pandemic, many commercial and industrial buildings were closed, and if left unattended, their water systems and cooling towers may have stagnated over time," said Kacey Pouliot, Product Manager, Pall Laboratory. "As facilities reopen, *Legionella* testing is expected to increase, making accurate filter solutions attractive to testing laboratories."

### **Independent Studies Confirm PES' Superior Performance**

Independent laboratory studies were conducted to review the performance of Pall's Metricel Black PES membrane and several other commonly used membrane materials per the International Standard *ISO 11731*, "Water quality – Enumeration of *Legionella*." The membrane materials were tested to determine their recovery performance for *L. pneumophila* and *L. anisa* — two key pathogenic strains of *Legionella*.

In the studies, Pall's Metricel black PES membrane filter was compared to two widely-used black nitrocellulose membrane (NCM) filters. Performed by a third-party laboratory, the studies consisted of three replicates from three lots of Pall's black PES membrane filter, two lots of a black NCM membrane filter from a second supplier, and one lot of black NCM membrane filter from a third supplier. Pall's Metricel black PES membrane filters showed significantly better performance than the second and third supplier's black NCM membrane filters in the recovery of *L. pneumophila* from a pure culture-spiked water sample, including higher rates of recovery with better repeatability and reproducibility.

In the *L. anisa* study, the bacteria was able to grow without apparent inhibition from a pure culture inoculum on all three lots of Pall's black PES membrane filter with average recoveries ranging from 98% to 119% of the calculated inoculum. In contrast, no growth of *L. anisa* was observed on the NCM membrane filters — mimicking results obtained in 2016 interlaboratory studies carried out for the validation of the International Standard *ISO 11731*, "Water quality – Enumeration of *Legionella*."

Overall, the comparison studies suggested that the use of Pall's Metricel Black PES membrane filter for *Legionella* bacteria recovery in water samples provides more accurate results and greater recovery performance than the other materials tested. For more information, download the Scientific Brief "*Achieve Greater Accuracy and Recovery in Legionella Water Testing*" at <https://www.pall.com/legionella>.

### **About Pall Corporation**

Pall Corporation is a filtration, separation, and purification leader providing solutions to meet the critical fluid

management needs of customers across the broad spectrum of life sciences and industry. Pall works with customers to advance health, safety and environmentally responsible technologies. The company's engineered products enable process and product innovation and minimize emissions and waste. Pall Corporation serves customers worldwide. For more information, visit [www.pall.com/lab](http://www.pall.com/lab), or on [YouTube](#), [LinkedIn](#), [Twitter](#), or [Facebook](#).