

Independent Perfluorinated Compounds Removal Study

Date: October 17th, 2018

Method: The conducted test study was performed to evaluate the provided purifier units' filtration efficacy as per the client requested and laboratory developed protocol. The protocol represents a challenge that is adapted from protocol NSF/ANSI for Perfluorinated Compounds (PFCs, PFOA, PFOS) reduction efficacy. The water was spiked with the substances indicated below and then passed through the filter. The results are stated in the report below. All contaminants were reduced to a concentration equal to or less than the permissible limits set forth by NSF/ANSI. For the study, challenge water was continuously aspirated through the filters by peristaltic pump assembly at the indicated, maintained flow rates of manufacturers guidelines of 1.25 gallons per minute. After 1, 25, 50, 100, 150, 200 gallons were passed through each filter, effluent samples were collected in appropriate containers, and stabilized according to method. Prepared test water characteristics were measured as per laboratory's accredited ISO17025:2005 methodology.

Filter Description: Epic Water Filters - Epic Smart Shield Under Sink Filter

Water Contaminants Tested: Perfluorinated Compounds (PFOA & PFOS)

Results:

Perfluorooctanoic Acid (PFOA) - (µg/L) NSF/ANSI STANDARD								
Filter Description	Influent Concentration in ppm	1 Gal	25 Gal	50 Gal	100 Gal	150 Gal	200 Gal	Average Percent Removal
Smart Shield by Epic Water Filters	0.5	0.01 (98%)	0.02 (96%)	0.04 (92%)	0.04 (92%)	0.04 (92%)	0.03 (94%)	94.0%

Perfluorooctane Sulfonate (PFOS) - (µg/L) NSF/ANSI STANDARD								
Filter Description	Influent Concentration in ppm	1 Gal	25 Gal	50 Gal	100 Gal	150 Gal	200 Gal	Average Percent Removal
Smart Shield by Epic Water Filers	1.04	<0.01 (99%)	0.02 (98%)	0.02 (98%)	0.02 (98%)	0.02 (98%)	0.03 (97%)	98.0%

