

ENVIROTEK LABORATORIES, INC.

33 Third Street, Bordentown, NJ 08505 PHONE 856-583-0445 www.enviroteklab.com EPA ID # NJ01298 NJ DEP ID # 03048 NY ELAP ID # 12044

PROPUR PROMAX FULL SPECTRUM FILTER PERFLUORINATED ORGANIC ACIDS TEST REPORT

Report # 17-03-Perfluorinated Organic Acids (Propur ProMax Full Spectrum Filter)

Report Date: 03/25/2017 Customer Name: Propur

EXECUTIVE SUMMARY

One Hundred gallons of tap water was spiked with Perfluoro-Octanoic Acid (PFOA) Standard Solution to have a final concentration specified by the NSF Std. 53; the spiked tap water was filtered through the filter element and tested; the Propur ProMax Full Spectrum Filter meets the NSF Perfluoro-Octanoic Acid reduction test up to 100 gallons, tested following the NSF Std. 53.

INTRODUCTION

One Hundred gallons of tap water was spiked with Perfluoro-Octanoic Acid Standard Solution to have a final concentration specified by the NSF Std. 53, the spiked tap water was filtered through the filter element and tested; the Propur ProMax Full Spectrum Filter meets the NSF Perfluoro-Octanoic Acid reduction test up to 100 gallons, tested following the NSF Std. 53.

REAGENTS, MATERIALS, AND LAB EQUIPMENT

Agilent GC/MS 6890 plus/5973 mass spectrometer. Sigma Aldrich Pefluoro-Octanoic Acid Reagent Grade Propur ProMax Full Spectrum Filter.

PROCEDURE

One Hundred gallons of tap water was spiked with Perfluoro-Octanoic Acid Standard Solution in a tank and mixed well; this solution was tested and adjusted to have a final concentration specified by the NSF Std. 53, the influent water properties are summarized in Table 1 below. The solution was filtered through the ProMax Full Spectrum Filter and tested every 20 gallons following the EPA method for Perfluoro-Octanoic Acid in drinking water. The results are summarized in Table 2 below.

RESULTS

Table 1
Influent Challenge Water Properties

		8		
	Parameter	Influent Challenge Water	Target	
١	pH	7.85	7.00 to 8.00	
1	Temperature	21.5 °C	20 ± 2.5 ℃	
	TDS	315 mg/L	200 to 500 mg/L	
	Turbidity	0.75 NTU	Nephelometric Turbidity Units	

Table 2
Filtered Water Perfluorinated Organic Acids Test Results

Therea water remudificated Organic Acids rest Results				
Drinking Water Contaminant Tested	Influent Water	NSF/EPA Effluent Maximum	% Reduction at	
	Results in μg/L	Contaminant Limit (MCL)	100 gallons	
Perfluorooctanoic Acid (surrogate)	2.2 μg/L	0.02	>99.9 %	
Perfluorobutane Sulfonate (PFBS)	2.2 μg/L	0.02	>99.9 %	
Perfluorodecanoic acid (PFDA)	2.2 μg/L	0.02	>99.9 %	
Perfluorohexanoic acid (PFHxA)	2.2 μg/L	0.02	>99.9 %	
Perfluorononanoic acid (PFNA)	2.2 μg/L	0.02	>99.9 %	
Perfluorooctane Sulfonate (PFOS)	2.2 μg/L	0.02	>99.9 %	
Perfluorohexane Sulfonate (PFSxS)	2.2 μg/L	0.02	>99.9 %	
Polytetrafluoroethylene (PTFE)	2.2 μg/L	0.02	>99.9 %	
Fluorotelomer alcohol 8:2	2.2 μg/L	0.02	>99.9 %	



ENVIROTEK LABORATORIES, INC.

33 Third Street, Bordentown, NJ 08505 PHONE 856-583-0445 www.enviroteklab.com EPA ID # NJ01298 NJ DEP ID # 03048 NY ELAP ID # 12044

CONCLUSION:

The Propur ProMax Full Spectrum Filter meets the NSF Perfluorinated Organic Acids reduction test for up to 100 gallons, tested following the NSF Std. 401.

CERTIFICATION OF RESULTS:

I certify in writing that all analyses, and reporting performed herein, comply with all requirements set forth in N.J.A.C. 7:9E and N.J.A.C. 7:18, and hereby certify that this laboratory is in compliance with all laboratory certification and quality control procedures and requirements as set forth in N.J.A.C. 7:18; the NYCRR Subpart 55-2 and the National Environmental Laboratory Accreditation Conference (NELAC) Institute Standards. **Disclaimer:** The test results are only related to the filter sample tested.

Jaime A. Young Lab Director



The reduction of contaminants or other substances that may be present in your water supply may vary depending on its content. The contaminants or other substances reduced are not necessarily present in all users water. Some contaminants may be more easily filtered than others. Percentage of reduction will vary over the life of the filter based on the level of contaminant(s) found in your water supply, user rate and psi of your water source. Testing was performed under standard laboratory conditions. Actual performance may vary. Do not use with water that is microbiologically unsafe or of unknown water quality with adequate disinfection.