Foamulations, LLC
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Test Results For

Sawyer Products

Sawyer Select S1 Filter

P.O. Box 188, Safety Harbor, FL 34695

Protocols tested by;
Aquadiagnostics Water Research and Technology Laboratories
www.aquadiagnostics.com
and
Envirotek Laboratories, INC
www.enviroteklab.com

Product tested for:
Biological, Chlorine, Chloroform, Chemical, PCB,
and Sulfide reduction.

The Sawyer Select S1 Filter reduces color, taste, and odor, chemical, organic, PCB, and sulfide contaminants to levels well below EPA and NSF recommends and is combined with a hollow fiber membrane filter that also removes sediment, >99.99999% of bacteria, and 99.9999% of protozoa and cysts.

Performance Requirements:

The performance requirements are comprised from multiple requirements. First is that the influent challenge needs to reflect concentrations found in nature to create a test which will give actual usage data. Secondly the effluent levels will need to be both below the EPA's MCL and SMCL to ensure the water is both safe and palatable. Finally, the goal effluent contamination level needs to be large enough that commonly available equipment will have an adequate confidence factor for both repeatability but also to ensure consumer safety. Testing was performed with standard test water containing listed concentration of contaminants to through 50% of uses then the challenge test water containing listed concentrations of contaminants was used to completion.

Table 1
Biological Testing Summary;

Contaminant	Influent	Effluent at 400 uses	% reduction	EPA Requirement
Klebsiella Terrigena MTCC 2271	6.5x10^5 cfu/ml	No visable Count /100ml	>99.9999	99.9999

Conducted By Aquadiagnostics Laboratories

Table 2
Sulfide Testing Summary;

Contaminant	Influent (mg/L)	Effluent (mg/L) at 400 uses	% reduction	EPA Requirement (mg/L)
Sulfide	1	<0.1	>99%	

Conducted By Envirotek Laboratories

Chemical Testing used Chloroform as a surrogate as allowed by NSF53 which required an above average concentration.

Table 3
Chemical Testing Summary;

Contaminant	Influent (mg/L)	Effluent (mg/L) at 400 uses	% reduction	EPA Requirement (mg/L)
Polychlorinated Biphenyls 1060/1260	0.00131	0.0002	84.70%	0.0005
Chloroform	0.3008	0.00547	98.20%	0.08
Alachlor	0.05	0.001	>98%	0.002
Atrazine	0.1	0.003	>97%	0.003
Benzene	0.081	0.001	>99%	0.005
Carbofuran	0.19	0.001	>99%	0.04
Carbon Tetrachloride	0.078	0.0018	98%	0.005
Chlorobenzene	0.077	0.001	>99%	0.1
Chloropicrin	0.015	0.0002	99%	
2,4-D	0.11	0.0017	98%	0.07
Dibromochloropropane	0.052	0.00002	>99%	0.0002
o-dichlorobenzene	0.08	0.001	>99%	0.6
p-dichlorobenzene	0.04	0.001	>98%	0.075
1,2-dichloroethane	0.088	0.0048	95%	0.005
1,1-dichloroethylene	0.083	0.001	>99%	0.007
cis-1,2-dichloroethylene	0.17	0.0005	>99%	0.07
trans-1,2-dichloroethylene	0.086	0.001	>99%	0.1
1,2-dichloropropane	0.08	0.001	>99%	0.005
cis-1,3-dichloropropylene	0.079	0.001	>99%	
dinoseb	0.17	0.0002	99%	0.007

Table 3 Cont.

endrin	0.063	0.00059	99%	0.002
ethylbenzene	0.088	0.001	>99%	0.7
ethylene dibromide	0.044	0.00002	>99%	0.00005
bromochloroacetonitrile	0.022	0.0005	98%	
dibromoacetonitrile	0.024	0.0006	98%	
dichloroacetonitrile	0.0096	0.0002	98%	
trichloroacetonitrile	0.015	0.0003	98%	
Heptachlor	0.025	0.00001	>99%	0.0004
Hetachlor epoxide	0.0107	0.0002	98%	0.0002
Hexachlorobutadiene	0.044	0.001	>99%	
Hexachlorocyclopentadiene	0.06	0.000002	>99%	0.05
Lindane	0.055	0.00001	>99%	0.0002
Mehoxychlor	0.05	0.0001	>99%	0.04
Pentachlorophenol	0.096	0.001	>99%	0.001
Simazine	0.12	0.004	>97%	0.004
Styrene	0.15	0.0005	>99%	0.1
1,1,2,2-tetrachloroethane	0.081	0.001	>99%	
tetrachloroethylene	0.081	0.001	>99%	0.005
toluene	0.078	0.001	>99%	1
2,4,5-TP (silvex)	0.27	0.0016	99%	0.05
1,2,4-trichlorobenzene	0.16	0.0005	>99%	0.07
1,1,1-trichloroethane	0.084	0.0046	95%	0.2
1,1,2-trichloroethane	0.15	0.0005	>99%	0.005
trichloroethylene	0.18	0.001	>99%	0.005
Xylenes (total)	0.07	0.001	>99%	10

Conducted By Envirotek Laboratories

Chlorine Testing used Chlorine as a surrogate for Taste and Odor.

Table 4
Chlorine Testing Summary;

Contaminant	Influent (mg/L)	Effluent (mg/L) at 400 uses	% reduction	EPA Requirement (mg/L)
Chlorine	0.5	<0.05	>90%	4

Conducted By Aquadiagnostics Laboratories

Referenced Documents:

17-174 Metals Test
17-174-S1 Organic Test
FOAMULATION S1 Sawyer Bottle 12512B-12512C 17-18 Cl2 reduction
Microbiological Testing of the Sawyer Mini Filter Report

Foamulations, LLC certifies that all testing data is provided directly from the third party certified laboratories.