

## NSF PERFORMANCE DATA

APRIL 2017

Multipure's Aqualuxe Drinking Water System is tested according to NSF/ANSI Standard 42 (Aesthetic Effects), Standard 53 (Health Effects), Standard 401 (Emerging Contaminants) and NSF P231 (microbiological purifier).

## NSF/ANSI 42 - Aesthetic Effects

Multipure's Aqualuxe Drinking Water System has been tested according to NSF/ANSI Standard 42 for the reduction of the following substances. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system.

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
CHLORAMINE as Aesthetic Effect (As Monochloramine)	97.5%	3.0 mg/L +/- 10%	0.001
CHLORINE as Aesthetic Effect	>97.5%	2.0 mg/L +/- 10%	> or = 50%
PARTICULATE, (Nominal Particulate Reduction, Class I, Particles 0.5 TO <1 µm)	99.8%	At Least 10,000 particles/mL	> or = 85%

## NSF/ANSI 53 - Health Effects

Multipure's Aqualuxe Drinking Water System has been tested according to NSF/ANSI Standard 53 for the reduction of the following substances. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system.

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
ALACHLOR*	>98%	0.050	0.001
ARSENIC (pentavalent As (V); As (+5); arsenate @ 6.5 pH)	97.9%	0.050 +/- 10%	0.010
ARSENIC (pentavalent As (V); As (+5); arsenate @ 8.5 pH)	97.6%	0.050 +/- 10%	0.010
ASBESTOS	>99%	10 <sup>7</sup> to 10 <sup>8</sup> fibers/L; fibers greater than 10 micrometers in length	99% reduction requirement
ATRAZINE*	>97%	0.100	0.003
BENZENE*	>99%	0.081	0.001
BROMODICHLOROMETHANE (TTHM)*	>99.8%	0.300	0.015
BROMOFORM (TTHM)*	>99.8%	0.300	0.015
CARBOFURAN (Furadan)*	>99%	0.19	0.001
CARBON TETRACHLORIDE*	98%	0.078	0.0018
CHLORDANE	>99.5%	0.04 +/-10%	0.002
CHLOROBENZENE (Monochlorobenzene)*	>99%	0.077	0.001
CHLOROPICRIN*	99%	0.015	0.0002
CHLOROFORM (TTHM)* (surrogate chemical)	>99.8%	0.300	0.015
Cryptosporidium (CYST)	>99.99%	minimum 50,000/L	99.95% reduction requirement
CYST (Giardia; Cryptosporidium; Entamoeba; Toxoplasma)	>99.99%	minimum 50,000/L	99.95% reduction requirement
2, 4-D*	98%	0.110	0.0017
DBCP (see Dibromochloropropane)*	>99%	0.052	0.00002
1,2-DCA (see 1,2-DICHLOROETHANE)*	95%	0.088	0.0048
1,1-DCE (see 1,1-DICHLOROETHYLENE)*	>99%	0.083	0.001
DIBROMOCHLOROMETHANE (TTHM; Chlorodibromomethane)*	>99.8%	0.300	0.015
DIBROMOCHLOROPROPANE (DBCP)*	>99%	0.052	0.00002
o-DICHLOROBENZENE (1,2 Dichlorobenzene)*	>99%	0.080	0.001
p-DICHLOROBENZENE (para-Dichlorobenzene)*	>98%	0.040	0.001
1,2-DICHLOROETHANE (1,2-DCA)*	95%	0.088	0.0048

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
Toxoplasma (see CYSTS)	>99.99%	minimum 50,000/L	99.95% reduction requirement
2,4,5-TP (Silvex)*	99%	0.270	0.0016
TRIBROMOACETIC ACID*	>98%	0.042	0.001
1,2,4 TRICHLORO BENZENE (Unsymtrichlorobenzene)*	>99%	0.160	0.0005
1,1,1-TRICHLOROETHANE (1,1,1-TCA)*	95%	0.084	0.0046
1,1,2-TRICHLOROETHANE*	>99%	0.150	0.0005
TRICHLOROETHYLENE (TCE)*	>99%	0.180	0.0010
TRIHALOMETHANES (THM) (Chloroform; Bromoform; Bromodichloromethane; Dibromochloromethane)	>99.8%	0.300	0.015
TURBIDITY	>99%	11 +/- 1 NTU	0.5 NTU
Unsym-Trichlorobenzene (see 1,2,4-TRICHLORO BENZENE)*	>99%	0.160	0.0005
Vinylbenzene (see STYRENE)*	>99%	0.150	0.0005
XYLENES (TOTAL)*	>99%	0.070	0.001

## Standard 401 Incidental Contaminants / Emerging Compounds

Multipure's Aqualuxe Drinking Water System has been tested according to NSF/ANSI 401 for reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in the NSF/ANSI 401\*\*\*.

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
<b>Group I</b>			
Atenolol	>96.4%	200 ± 20%	0.00003 mg/L
Carbamazepine	>98.5%	1400 ± 20%	0.0002 mg/L
DEET	>98.6%	1401 ± 20%	0.0002 mg/L
Linuron	>96.5%	140 ± 20%	0.00002 mg/L
Meprobamate	>95.3%	400 ± 20%	0.00006 mg/L
Metolachlor	>98.7%	1400 ± 20%	0.0002 mg/L
Trimethoprim	>96.8%	140 ± 20%	0.00002 mg/L
<b>Group II</b>			
TCEP	>98%	5000 ± 20%	0.0007 mg/L
TCP	>97.9%	5000 ± 20%	0.0007 mg/L
<b>Group III</b>			
Bisphenol A	>99%	2000 ± 20%	0.0003 mg/L
Estrone	>96.6%	140 ± 20%	0.00002 mg/L
Ibuprofen	>95.1%	400 ± 20%	0.00006 mg/L
Naproxen	>96.4%	140 ± 20%	0.00002 mg/L
Nonyl phenol	>96.5%	1400 ± 20%	0.0002 mg/L
Phenytoin	>95.4%	200 ± 20%	0.00003 mg/L

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
1,1-DICHLOROETHYLENE (1,1-DCE)*	>99%	0.083	0.001
CIS-1,2-DICHLOROETHYLENE*	>99%	0.170	0.0005
TRANS-1,2- DICHLOROETHYLENE*	>99%	0.086	0.001
1,2-DICHLOROPROPANE (Propylene Dichloride)*	>99%	0.080	0.001
CIS-1,3- DICHLOROPROPYLENE*	>99%	0.079	0.001
DINOSEB*	99%	0.170	0.0002
EDB (see ETHYLENE DIBROMIDE)*	>99%	0.044	0.00002
ENDRIN*	99%	0.053	0.00059
Entamoeba (see CYSTS)	>99.99%	minimum 50,000/L	99.95% reduction requirement
ETHYLBENZENE*	>99%	0.088	0.001
ETHYLENE DIBROMIDE (EDB)*	>99%	0.044	0.00002
Furadan (see CARBOFURAN)*	>99%	0.19	0.001
Giardia Lamblia (see CYST)	>99.99%	minimum 50,000/L	99.95% reduction requirement
HALOACETONITRILES (HAN)*			
BROMOCHLOROACETONITRILE	98%	0.022	0.0005
DIBROMOACETONITRILE	98%	0.024	0.0006
DICHLOROACETONITRILE	98%	0.0096	0.0002
TRICHLOROACETONITRILE	98%	0.015	0.0003
HALOKETONES (HK):*			
1,1-DICHLORO-2-PROPANONE	99%	0.0072	0.0001
1,1,1-TRICHLORO-2-PROPANONE	96%	0.0082	0.0003
HEPTACHLOR*	>99%	0.25	0.00001
HEPTACHLOR EPOXIDE*	98%	0.0107	0.0002
HEXACHLOROBUTADIENE (Perchlorobutadiene)*	>98%	0.044	0.001
HEXACHLOROCYCLOPENTADIENE*	>99%	0.060	0.000002
LEAD (pH 6.5)	>99.3%	0.15 +/- 10%	0.010
LEAD (pH 8.5)	>99.3%	0.15 +/- 10%	0.010
LINDANE*	>99%	0.055	0.00001
MERCURY (pH 6.5)	>96.6%	0.006 +/- 10%	0.002
MERCURY (pH 8.5)	>96.7%	0.006 +/- 10%	0.002
METHOXYCHLOR*	>99%	0.050	0.0001
Methylbenzene (see TOLUENE)*	>99%	0.078	0.001
Monochlorobenzene (see CHLORO BENZENE)*	>99%	0.077	0.001
MTBE (methyl tert-butyl ether)	>97%	0.015 +/- 20%	0.005
POLYCHLORINATED BIPHENYLS (PCBs , Aroclor 1260)	>97%	0.01 +/- 10%	0.0005
PCE (see TETRACHLOROETHYLENE)*	>99%	0.081	0.001
PENTACHLOROPHENOL*	>99%	0.096	0.001
Perchlorobutadiene (see HEXACHLOROBUTADIENE)*	>98%	0.044	0.001
Propylene Dichloride (see 1,2 -DICHLOROPROPANE)*	>99%	0.080	0.001
RADON	>94.9%	4000 ± 1000 pCi/L	300 pCi/L
SIMAZINE*	>97%	0.120	0.004
Silvex (see 2,4,5-TP)*	99%	0.270	0.0016
STYRENE (Vinylbenzene)*	>99%	0.150	0.0005
1,1,1-TCA (see 1,1,1 - TRICHLOROETHANE)*	95%	0.084	0.0046
TCE (see TRICHLOROETHYLENE)*	>99%	0.180	0.0010
1,1,2,2- TETRACHLOROETHANE*	>99%	0.081	0.001
TETRACHLOROETHYLENE*	>99%	0.081	0.001
TOLUENE (Methylbenzene)*	>99%	0.078	0.001
TOXAPHENE	>95%	0.015 +/- 10%	0.003