



Performance Data Sheet

Multi-Pure Model No. MP750 Plus RO Drinking Water Systems have been tested and certified under NSF Standard Nos. 42, 53 and 58 as shown 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 NSF/ANSI 53, Health Effects.

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration
ALACHLOR*	>98%	0.05	0.001
ASBESTOS	>99.9%	10 ⁷ to 10 ⁸ fibers/L; fibers greater than 10 micrometers in length	99% reduction requirement
ATRAZINE*	>97%	0.1	0.003
BENZENE*	>99%	0.081	0.001
BROMODICHLOROMETHANE (TTHM)*	>99.8%	0.300 +/- 0.30	0.015
BROMOFORM (TTHM)*	>99.8%	0.300 +/- 0.30	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 +/- 0.30	0.015
Cryptosporidium (CYST)	99.95%	minimum 50,000/mL	99.95%
CYST (Giardia; Cryptosporidium; Entamoeba; Toxoplasma)	99.95%	minimum 50,000/mL	99.95%
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 +/- 0.30	0.015
DIBROMOCHLOROPROPANE (DBCP)*	>99%	0.052	0.00002
o-DICHLOROBENZENE (1,2 Dichlorobenzene)*	>99%	0.08	0.001
p-DICHLOROBENZENE (para-Dichlorobenzene)*	>98%	0.04	0.001
1,2-DICHLOROETHANE (1,2-DCA)*	95%	0.088	0.0048
1,1-DICHLOROETHYLENE (1,1-DCE)*	>99%	0.083	0.001
CIS-1,2-DICHLOROETHYLENE*	>99%	0.17	0.0005
TRANS-1,2- DICHLOROETHYLENE*	>99%	0.086	0.001
1,2-DICHLOROPROPANE (Propylene Dichloride)*	>99%	0.08	0.001
CIS-1,3- DICHLOROPROPYLENE*	>99%	0.079	0.001
DINOSEB*	99%	0.17	0.0002
EDB (see ETHYLENE DIBROMIDE)*	>99%	0.044	0.00002
ENDRIN*	99%	0.053	0.00059
Entamoeba (see CYSTS)	99.95%	minimum 50,000/mL	99.95%
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)	>99.95%	minimum 50,000/mL	99.95%
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

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration
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)	>99%	0.006 +/- 10%	0.002
MERCURY (pH 8.5)	>99%	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)	>96.6%	0.015 +/- 20%	0.005
POLYCHLORINATED BIPHENYLS (PCBs , Aroclor 1260)	>99.9%	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
SIMAZINE*	>97%	0.120	0.004
Silvex (see 2,4,5-TP)*	99%	0.270	0.0016
STYRENE (Vinylbenzene)*	>99%	0.15	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	>92.9%	0.015 +/- 10%	0.003
Toxoplasma (see CYSTS)	99.95%	minimum 50,000/mL	99.95%
2,4,5-TP (Silvex)*	99%	0.270	0.0016
TRIBROMOACETIC ACID*		0.042	0.001
1,2,4 TRICHLORO BENZENE (Unsym trichlorobenzene)*	>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 (TTHM) (Chloroform; Bromoform; Bromodichloromethane; Dibromochloromethane)	>99.8%	0.300 +/- 0.30	0.015
TURBIDITY	>99%	11 +/- 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

NSF/ANSI 42 - Aesthetic Effects

The 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	Maximum permissible product water concentration
CHLORAMINE as Aesthetic Effect (As Monochloramine)	>97%	3.0 mg/L +/- 10%	0.5 mg/L
CHLORINE as Aesthetic Effect	99%	2.0 Mg/L +/- 10%	> or = 50%
PARTICULATE, (Nominal Particulate Reduction, Class I, Particles 0.5 TO <1 UM	Class I > 99%	At Least 10,000 particles/mL	> or = 85%

NSF/ANSI 58 - Reverse Osmosis

The System has been tested according to NSF/ANSI Standard 58 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, as specified in NSF/ANSI 58.

Substance	Percent Reduction	Influent Challenge (mg/L unless specified)	Maximum Permissible Product Water mg/L
Arsenic V (pentavalent As (V); As(+5); arsenate)	98.4%	0.30 +/- 10%	0.010
Barium	97.9%	10.0 +/- 10%	2.0
Cadmium	98.6%	0.03 +/- 10%	0.005
Chromium, Hexavalent	91.3%	0.3 +/- 10%	0.1
Chromium, Trivalent	94.1%	0.3 +/- 10%	0.1
Copper	99.0%	3.0 +/- 10%	1.3
Cyst (Giardia, Cryptosporidium, Entamoeba, Toxoplasma)	99.99%	50,000 mL	0.9995
Fluoride	93.9%	8.0 +/- 10%	1.5
Lead	98.6%	0.15 +/- 10%	0.010
Nitrate	76.54%	27.0 +/- 10%	10.0
Nitrite	82.14%	3.0 +/- 10%	1.0
Nitrate/Nitrite	82.14%	30.0 +/- 10%	10.0
Radium 226/228	80.0%	25 pCi/L +/- 10%	5 pCi/L
Selenium	92.0%	0.10 +/- 10%	0.05
Total Dissolved Solids (TDS)	96.8%	750 +/- 40 mg/L	187

NOTES:

1. Multi-Pure Drinking Water Systems have been certified, as indicated, by NSF International for compliance to NSF/ANSI Standard Nos. 42 and 53, and 58.
2. This Multi-Pure Drinking Water System(s) have been certified by the State of California Department of Health Services for the reduction of specific contaminants listed herein.
3. Chloroform was used as a surrogate for claims of reduction of Volatile Organic Chemicals (VOC). Multi-Pure Systems tested at >99.8% actual reduction of Chloroform. Percent reduction shown herein reflects the allowable claims for VOCs as per tables in the Standard.
4. **Do not use with water that is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.**
5. The System may be used with municipal or well water sources that are treated and tested on a regular basis to ensure bacteriological safe quality of the water.
6. Do not allow water to freeze in the unit. If unit is exposed to freezing temperatures, drain water from unit and remove filters.
7. Do not allow water to sit in unit for extended periods of time (10 or more days) without being used. If unit is to be left unused for more than 10 days, drain all water from the system and remove the filters. Upon your return, reconnect the filters in the housing and continue use. In the event water does sit in the unit for 10 or more days, the system should be flushed by allowing water to flow to waste for about 10 minutes; then continue use as normal.
8. Multi-Pure Drinking Water System stainless steel housing is warranted for a period of 25 years; plastic housings are warranted for three years. All exterior hoses and attachments to the System are warranted for defects in material and workmanship for one year. Please see the Owner's Manual for complete product guarantee and warranty information.
9. Please see the Owner's Manual for installation instructions and operating procedures.
10. In compliance with New York law, it is recommended that before purchasing a water treatment system, NY residents have their water supply tested to determine their actual water treatment needs. Please compare the capabilities of the Multi-Pure unit with your actual water treatment needs.
11. Check for compliance with state and local laws and regulations.
12. While testing was performed under standard laboratory conditions, actual performance may vary.
13. The list of substances which the treatment device reduces does not necessarily mean that these substances are present in your tap water.
14. This system is acceptable for treatment of influent concentrations of no more than 27 mg/L nitrate and 3 mg/L nitrite in combination measured as N and is certified for nitrate/nitrite reduction only for water supplies with a pressure of 280 kPa (40 psig) or greater.
15. This system has been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not remove other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic. Please see the Arsenic Facts section of the Performance Data Sheet for further information.

MP750 Plus RO Operation and Maintenance Specifications

Depending on water chemistry, water temperature, and water pressure, the MP750 Plus RO System production and performance will vary. Refer to Owner's Manual for further maintenance requirements and warranty information.

	<u>Parameter</u>	<u>Comments</u>
General Use Conditions:		
Maximum Operating Temperature	100°F / 40.5°C	
Minimum Operating Temperature	40°F / 0°C	
Maximum Working Pressure	100 psi / 7.0 kg/cm ²	The operating pressure in your home should be tested over a 24 hour period to attain the maximum pressure. If it is over 100 psi then a pressure regulator will be required.
Minimum Working Pressure	40 psi / 2.8 kg/cm ²	
pH parameters	3 pH to 11 pH	
Iron	0.2 ppm maximum	
TDS (total dissolved solids)	< 1800 ppm	
Turbidity	< 5 NTU	
Hardness	< 10 grains per gallon / 171 mg/L of hardness as CaCO ₃	System will operate with hardness over 10 grains, but the membrane life may be shortened.
Specifications:		
Average influent TDS	765 mg/L	
Average effluent TDS	23 mg/L	
Daily Production Rate (DPR)	17.32 gpd	Gallons produced per day
Efficiency Rating	8.91%	Efficiency rating means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage.
Recovery Rating	16.34%	Recovery rating means the percentage of the influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed.
Capacity of Tank	3 gallons	
Approximate Flow Rate @ 60 psi	0.50 gpm	

Facts About Arsenic (in compliance with NSF Standard 58)

Arsenic (abbreviated As) is a naturally occurring contaminant found in many ground waters. Arsenic in water has no color, taste or odor. It must be measured by a lab test. Public water utilities must have their water tested for arsenic. You can get the results from your water utility. If you have your own well, you can have the water tested. The local health department or the state environmental health agency can provide a list of certified labs. The cost is typically \$15 to \$30. Information about arsenic in water can be found on the Internet at the US Environmental Protection Agency website: www.epa.gov/safewater/arsenic.html.

There are two forms of arsenic: pentavalent arsenic (also called As(V), As(+5), and arsenate) and trivalent arsenic (also called As(III), As(+3), and arsenite). In well water, arsenic may be pentavalent, trivalent, or a combination of both. Special sampling procedures are needed for a lab to determine what type and how much of each type of arsenic is in the water. Check with the labs in your area to see if they can provide this type of service.

Reverse Osmosis (RO) systems are very effective at removing pentavalent arsenic. However, RO systems do not remove trivalent arsenic from water very well. A free chlorine residual will rapidly convert trivalent arsenic to pentavalent arsenic. Other water treatment chemicals such as ozone and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A combined chlorine residual (also called chloramine) may not convert all the trivalent arsenic. If you

get your water from a public water utility, contact the utility to find out if free chlorine or combined chlorine is used in the water system.

The **Multi-Pure MP750 Plus RO** is designed to remove only pentavalent arsenic. It will not convert trivalent arsenic to pentavalent arsenic.

This treatment system was tested in a laboratory to remove pentavalent arsenic. Under lab conditions, as defined in NSF/ANSI Standard 58, the system reduced 0.30 mg/L (ppm) pentavalent arsenic to 0.010 mg/L (ppm) (the USEPA standard for drinking water) or less. The performance of the system may be different at your installation. Have the treated water tested for arsenic to check if the system is working properly.

The RO component of the Multi-Pure **MP750 Plus RO** system must be replaced as indicated in the Owner's Manual to ensure the system will continue to remove arsenic and other contaminants. The component identification and locations where you can purchase the component are listed in the installation/operation manual.



Multi-Pure Corporation

7251 Cathedral Rock Drive
Las Vegas, NV 89128
800-622-9206 · 702-360-8880
headquarters@multipureco.com
www.multipure.com

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