# Multipure®



# Aquadome Drinking Water System For Countertop Use Only

Model No. MPAD

# Owner's Manual

Please retain this manual for future reference.

Multipure International ● P.O. Box 34630 ● Las Vegas, NV 89133-4630 Phone 702.360.8880 ● Toll-Free 800.622.9206 www.multipure.com ● headquarters@multipure.com

# **Multipure Drinking Water Systems**

Thank you for selecting a Multipure Drinking Water System to meet your need for quality drinking water. You have acquired one of the finest drinking water treatment devices available for the reduction of a wide array of contaminants. We are confident that your Multipure System will make a difference in your life. Thank you for your business.

### **Table of Contents**

Abo	ut	3
Befo	ore You Begin	3
Spec	cifications	3
Insta	allation Overview and Part Numbers	4
1.	<ul> <li>Installation</li> <li>1.1: Inspect Your Drinking Water System</li> <li>1.2: Connect the Hose to the Housing</li> <li>1.3: Connect the Hose and Diverter Valve to the Faucet</li> <li>1.4: Disconnecting the Hose and Diverter Valve (when replacing hose)</li> <li>1.5: Prepare Your Drinking Water System</li> </ul>	4 5 5-6 6
2.	Operation 2.1: Operating Your Drinking Water System	6
3.	Maintenance 3.1: Regarding Filter Capacity 3.2: Removing the Old Filter 3.3: Installing the New Filter 3.4: Drinking Water System Will Be Unused for More than 10 Days 3.5: Flushing / Disinfecting the System	7 7 7 8 8
4.	Additional Information 4.1: Warranty 4.2: Performance Certifications 4.3: Performance Data Sheet 4.4: California Certification 4.5: Troubleshooting 4.6: Frequently Asked Questions	8 9 10-12 13 14 15

# About the Aquadome Drinking Water System

- The Multipure Aquadome Drinking Water System (Model# MPAD) is designed for use on the countertop next to the sink. It connects to the existing faucet with a diverter valve that allows free selection between filtered and unfiltered water.
- The Aguadome includes all the accessories and fittings required for installation.
- If installation or operation assistance is required, please contact your Multipure Independent Distributor. If the Independent Distributor is unavailable, please contact Multipure Customer Service at 1.800.622.9206.

### **Before You Begin**

Multipure Drinking Water Systems (DWS) have been extensively tested and certified by NSF International to provide the highest level of assurance that the device will perform as claimed. Please read this manual before proceeding with the installation and use of your system. Installation, operation, and maintenance requirements are essential to the performance of your system – failure to follow any instructions or operating parameters contained herein may lead to product damage or product failure.

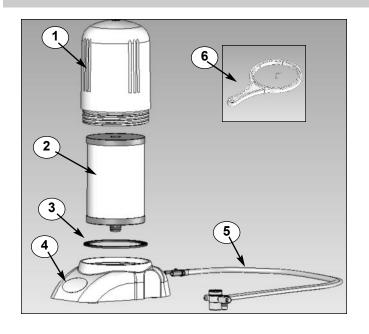
- Replacement filters can be purchased directly from Multipure. For the latest prices, please visit our website at <a href="http://www.multipure.com/store/">http://www.multipure.com/store/</a>.
- Actual filter life depends on the amount of water used and the level of impurities in the water. See 3.1: Regarding Filter Capacity for additional details.
- Multipure Drinking Water Systems are not intended for use with microbiologically unsafe water or non-municipally-treated water. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts. See 4.6: Frequently Asked Questions for additional details.
- Do not allow water to freeze in the system. If the system is exposed to freezing temperatures, drain water from the system and remove the filter. Allow the filter to thaw before replacing and reusing.
- Do not allow water to sit in the system for extended periods of time (e.g., 10 days or more) without use. See 3.4: If Your Drinking Water System Will Be Unused for More than 10 Days for additional details.
- To dispose of the used filter, remove it from the housing and place in normal refuse. Filters disposed in a normal landfill will not release any chemical contaminants and may continue to adsorb additional contaminants in the landfill.
- Check for compliance with any state or local laws and regulations before use.

# **Specifications**

	Aquadome Model
Model Numbers	MPAD
Approximate Filter Capacity	750 gallons
Replacement Filter Type	CB6AD
Approximate Flow Rate @ 60 psi	0.75 gpm
Housing Composition	Polypropylene
Rubber Items	Nitrile
Inlet	3/8" stem
Outlet	1/4" stem
Maximum Working Pressure	100 psi/7.0 kg/cm2
Minimum Working Pressure	30 psi/2.1 kg/cm2
Maximum Operating Temperature	100° F / 38°C - for cold water use only
Minimum Operating Temperature	32°F / 0°C - for cold water use only
Particle Retention Size	sub micron (0.5 micron)
Certified by:	NSF International



### **Installation Overview & Part Numbers**



### **Part Numbers**

800-50-3201 Housing Top
 CB6AD Filter Cartridge
 MC357 Black Gasket
 800-51-3201 Housing Bottom

5. MC6500ASBL Hose and Diverter Valve

6. MC008 Hand Tool

7. MC700 4 Standard Adapters\*

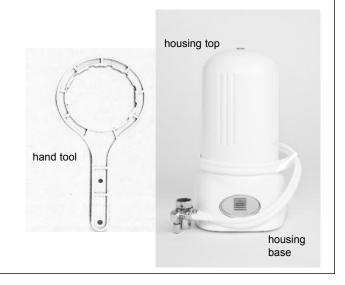
(shown on page 5)

### I. Installation

# 1.1: Inspect Your Drinking Water System

NOTE: The filter cartridge is factory-installed inside the unit housing. The Aqua Dome unit is for countertop use only.

- 1. Inspect your DWS to confirm that it has been received in good condition and that all parts are included.
- Determine a countertop location for system placement, factoring in distance to the faucet for diverter valve and hose connection.
- 3. Inspect the system housing to confirm that the housing top and bottom are securely connected.
  - a. With the system sitting upright, slide the hand tool over the top so that the ridges on the tool fit into the grooves on the housing top.
  - b. While holding the system base in place, firmly turn the hand tool clockwise to tighten the housing top.

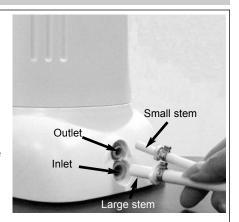


<sup>\*</sup> Adapters are not included as part of the NSF Unit Certification.

### 1.2: Connect the Hose to the Housing

NOTE: The Aqua Dome comes with a diverter valve and hose that connects the drinking water system to your faucet.

- On the diverter valve and hose, locate the two stems at the end of the hose opposite the diverter valve. Identify the large stem (Inlet Stem) and small stem (Outlet Stem).
- On the DWS, locate the two ports on the bottom rear of the system housing. Identify the lower, large port (Inlet Port) and upper, small port (Outlet Port).
- 3. Insert the Inlet Stem into the Inlet Port by slowly pushing the stem straight into the port as far as possible. Confirm the connection by pushing the stem in again.
- Insert the Outlet Stem into the Outlet Port by slowly pushing the stem straight into the port as far as possible. Confirm the connection by pushing the stem in again.



### 1.3: Connect the Hose and Diverter Valve to the Faucet

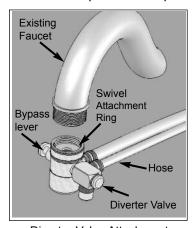
- 1. Remove the aerator or screen (if present) from the end of the faucet. If facing the open end of the spout, rotate the aerator counter-clockwise to loosen and remove.
- 2. Attach the diverter valve directly to the faucet spout. If the threads of the diverter valve do not match the threads of the faucet, use one of the included faucet adapters to connect the diverter valve and faucet. If facing the open end of the spout, rotate the diverter valve and/or adapter clockwise to tighten.

**NOTE:** When using a faucet adapter, the rubber washer in the adapter always faces up toward the faucet.

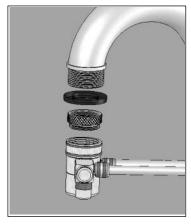
a. <u>If Your Faucet Has an Outside Thread (male connector):</u> For many faucets with an outside thread, the diverter valve can attach directly to the faucet. If the diverter valve is too small to attach to the faucet, attach the inside thread (female connector) adapter, part# MC106, to the faucet, and then attach the diverter valve to the adapter.



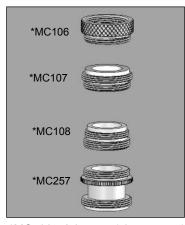
- b. If Your Faucet Has an Inside Thread (female connector):
  - The diverter valve cannot directly connect to a faucet with a female connector. Attach one of the outside thread (male connector) adapters, part# MC107 or part# MC108, to the faucet, and then attach the diverter valve to the adapter. MC107 is designed to fit larger faucets, and MC108 is designed to fit smaller faucets.
- c. <u>If Your Faucet Requires More Room for the Diverter Valve Connection:</u>
  Some faucets, particularly sprayer hose faucets, require additional room for the diverter valve connection. If this applies, attach the long adapter, part# MC257, to the opening of the faucet spout/sprayer, and then attach the diverter valve to the adapter. The DWS may need to be repositioned on the sink to allow enough room for sprayer faucet use.
- d. If the Adapters Do Not Fit Your Faucet:
  - Although the adapters included with your DWS allow connections with many standard faucets, they do not cover every type of available faucet connection. If none of the adapters allow the diverter valve to connect to your faucet, please contact Multipure Customer Service at 1.800.622.9206, ext. 175, to request either part# MC109 or part# MC719 as possible adapter solutions.



Diverter Valve Attachment



Diverter Valve Attachment with adapter



\*MC700 - Adapters (choose one) Many installations do not require an adapter

<sup>\*</sup> Adapters are not included as part of the NSF Unit Certification.

# 1.3: Connect the Hose and Diverter Valve to the Faucet (continued)

- 3. When connected properly, the hose from the diverter valve should lead toward the back of the faucet and sink.
- 4. The diverter valve features a bypass lever with a button on the left and right sides of the diverter valve. Press the left button to bypass the DWS and select the unfiltered water spout (larger opening). Turn on your faucet to let unfiltered water flow out of the diverter valve and to make sure that the diverter valve is properly connected.
- 5. Turn off the faucet.

# 1.4: Disconnecting the Hose and Diverter Valve (when replacing hose)

Follow these instructions when you are replacing the hose and diverter valve.

NOTE: Do not forcefully pull the connectors out, this will cause damage to the housing base. Ensure the system is depressurized before removing fittings.

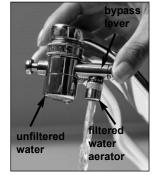
- 1. To disconnect the hose, you will need to release the small and large stem from the housing base (see Fig. A).
  - a. Push in the collet against the tube stop (center of the fitting). With the collet held in this position the tubing/stem can be removed. Repeat for both tubes.
- 2. Proceed with installing new hose to the housing (on previous page).



Fig. A

# 1.5: Prepare Your Drinking Water System

- 1. Using a paper towel or cloth, dry off all connections and the DWS housing.
- 2. Make sure that all connections are tightly secured.
- 3. Purge any air from the unit.
  - a. Turn the DWS housing upside down, and then turn on the faucet.
  - b. Press the right button on the diverter valve to select the filtered water spout. The water will flow through the DWS and emerge from the smaller opening on the diverter valve.
  - c. Allow water to flow through the DWS and filtered water spout for one minute.
  - d. Press the left button to select the unfiltered water spout, and then turn off the faucet.
- 4. Turn the DWS right side up and place it on the counter.
- 5. Make sure that all connections are tightly secured and that there are no leaks.
- Turn on the faucet and press the right button to selected the filtered water spout.
- 7. Allow water to flow through the DWS and filtered water spout for approximately 30 minutes. This will flush the filter and charge the carbon.
- 8. Press the left button to select the unfiltered water spout.
- 9. Turn off the faucet.
- 10. Check all connections to make sure that there are no leaks.





# 2. Operation

# 2.1: Operating Your Drinking Water System

- 1. For unfiltered water, press the left button on the diverter valve. Water from the faucet will emerge from the unfiltered water spout.
- 2. For filtered water, press the right button on the diverter valve. Water from the faucet will flow through the DWS before emerging from the filtered water spout.

If you have any questions regarding the installation of your countertop unit, call Multipure:

Customer Service Department
7251 Cathedral Rock Drive, Las Vegas, NV 89128
702.360.8880 phone \* 800.622.9206 toll-free \* 702.360.8575 fax
email: custsvc@multipure.com \* www.multipure.com

### 3. Maintenance

# 3.1: Regarding Filter Capacity

- 1. Exact filter capacity varies in proportion to the amount of water used and the level of impurities in the water being processed. For contaminants reduced through physiochemical adsorption, the filter capacity is 750 gallons. For contaminants reduced through mechanical filtration, capacity claims are inapplicable due to broad variations in the quality and quantity of physical matter in the drinking water. Excessive physical matter will cause the DWS to clog, diminishing flow rate but reducing the contaminants from the resultant water stream.
- 2. For optimum performance and to maintain the lifetime warranty on your system housing, it is essential that the filter be replaced when the first of the following occurs: a. annually, b. when the system reaches its rated capacity, c. when the flow rate diminishes, or d. when the filter becomes saturated with bad tastes and/or odors.

# 3.2: Removing the Old Filter

- 1. Before opening the DWS housing, place the system either on a folded towel, in a basin or other container, or in the sink.
- 2. With the faucet off, press the right button on the diverter valve to select the filtered water spout and flush water out of the DWS.
- 3. When the flow of water stops, press the left button on the diverter valve to stop the filtered water spout.
- 4. With the system sitting upright, slide the hand tool over the top so that the ridges on the tool fit into the grooves on the housing top.
- 5. Holding the base steady, use the hand tool to turn the DWS counterclockwise to loosen.
- Once the top is loose, you can complete rotating it counter-clockwise by hand.
- 7. Once unscrewed, lift the housing top off of the base, leaving the black gasket on the bottom of the base.
- 8. Remove the old filter cartridge from the base by pulling it upward and slightly twisting until it is released from the base.
- 9. Dispose of the old filter in your waste container.
- 10. Rinse out the inside of the system housing, hand washing if necessary.

# 3.3: Installing the New Filter

- 1. If you have not done so already, remove the plastic wrapper and instruction wrap from around the new filter.
- 2. Insert the new filter in the center port of the housing base, twisting slightly. Push straight down on the filter to ensure that it is firmly in place.
- 3. Place the housing top over the filter and back onto the base. Turn it clockwise to tighten.
- 4. If necessary, use the hand tool to further tighten the housing top to the base, turning it clockwise while holding the base steady.
- 5. Proceed to 1.5: Preparing Your Drinking Water System to complete the installation.











Flush without filtered water aerator



# 3.4: If Your Drinking Water System Will Be Unused for More than 10 Days

To prevent the water sitting in the system from stagnating and becoming contaminated, flush the system and remove the filter if it will be unused for more than 10 days.

- 1. With the faucet off, press the right button on the diverter valve to select the filtered water spout and allow water to flow out of the DWS.
- 2. When the water flow stops, press the left button on the diverter valve.
- 3. Unscrew the housing top from the DWS by rotating it counter-clockwise.
- 4. With the housing top removed, pull out the filter cartridge and set it on a cloth or paper towel to dry.
- 5. Pour out any remaining water from the bottom half of the system housing.
- 6. Reconnect the top half of the system housing by rotating it clockwise.
- 7. To resume normal use of the DWS, proceed to 1.5 Prepare Your Drinking Water System.

# 3.5: Flushing / Disinfecting the System

If your DWS is left unused for more than 10 days with the filter and water inside, the stagnant water and system may become contaminated. Before it can be reused, the system must be flushed and disinfected, and the filter must be replaced.

- 1. With the faucet off, press the right button on the diverter valve to select the filtered water spout and allow water to flow out of the DWS.
- 2. When the flow of water stops, press the left button on the diverter valve.
- 3. Unscrew the housing top from the DWS by rotating it counter-clockwise.
- 4. With the housing top removed, pull out the filter cartridge and dispose of it in your refuse.
- 5. Clean and rinse out the inside of the system housing.
- 6. Add 5 to 7 drops of bleach to the bottom half of the housing.
- 7. Reconnect the top half of the housing without a replacement filter installed.
- 8. Turn the DWS housing upside down, and then turn on the faucet.
- 9. Press the right button on the diverter valve to select the filtered water spout and allow the water and bleach to fill up the DWS.
- 10. Once water begins to flow, press the left button to stop the filtered water spout.
- 11. Turn off the faucet.
- 12. Turn the DWS housing right side up and let the unit soak for at least 30 minutes.
- 13. After 30 minutes, with the faucet off, press the right button on the diverter valve to select the filtered water spout and flush the water and bleach out of the system.
- 14. When the flow of water stops, open, clean, and rinse out the inside of the system housing.
- 15. Proceed to 3.3: Installing the New Filter to install the new filter and initialize the system.

### 4. Additional Information

# 4.1: Warranty

- **Multipure 90-Day Guarantee:** Multipure is confident in the performance of its Drinking Water Systems (DWS). If you should find this Drinking Water System unsatisfactory, let us know within 90 days of purchase for a prompt exchange or refund.
- Multipure Warranty: Multipure Corporation warrants to the original retail customer its DWS and components to be free of defects in material and workmanship for use under normal care, and will repair or replace any system at no charge (excluding transportation to Multipure Corporate Headquarters) to the customer during the warranty period. The DWS housing is warranted for a lifetime (provided the filter has been changed at least once per year); all exterior hoses and attachments to the DWS are also warranted for defects in material and workmanship for one (1) year.

Multipure Solid Carbon Block Filters are warranted for defects in material and workmanship for use under normal care. The capacity of the filter cartridge depends upon the amount of impurities in the water to be processed.

Except as otherwise expressly provided above, Multipure Corporation makes no warranties, express or implied, arising by law or otherwise, including without limitation the implied warranties of merchantability and fitness for a particular purpose, to any person. This limited warranted may not be altered, varied, or extended except by a written instrument executed by Multipure Corporation. The remedy of repair or replacement as provided under this limited warranty is exclusive. In no event shall Multipure Corporation be liable for any consequential or incidental damages to any person whether occasioned by negligence of the manufacturer, including without limitation damages of loss of use, cost of substitution, property damage, or other monetary loss.

Warranty is valid only if the DWS is operated within conditions listed herein. The warranty begins from the date of purchase



# Multipure Drinking Water Systems Product Performance Tested and Certified

Multipure Drinking Water Systems have been tested and certified by NSF International to comply with NSF/ANSI Standards 42 and 53 for the reduction of contaminants specified below.

### Standard 42, Aesthetic Effects

System tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of:

Chloramine

Chlorine taste and odor

Nominal Particulate reduction, class I

### Standard 53, Health Effects

System tested and certified by NSF International against NSF/ANSI Standard 53 for the reduction of:

Asbestos Chlordane
Cyst Lead
Mercury MTBE
PCB Radon
Toxaphene Turbidity
VOC (listed below)

## Volatile Organic Chemicals (VOC) includes:

### **Disinfection By-Products**

chloropicrin

haloacetonitriles (HAN): bromochloroacetonitrile dibromoacetonitrile dichloroacetonitrile trichloroacetonitrile

haloketones (HK): 1,1-dichloro-2-Propanone

1,1-trichloro-2-Propanone

trihalomethanes (THMs; TTHMs):

bromodichloromethane

bromoform chloroform

dibromochloromethane tribromoacetic acid

## Chemicals

benzene carbon tetrachloride chlorobenzene 1,2-dichloroethane 1,1-dichloroethylene cis-1,2-dichloroethylene 1,2-dichloropropane cis-1,3-dichloropropylene

ethylbenzene

hexachlorobutadiene hexachlorocyclopentadiene

simazine stvrene

1,1,2,2-tetrachloroethane tetrachloroethylene

toluene

trans-1,2-dichloroethylene 1.2.4-trichlorobenzene

1,1,1-trichloroethane 1,1,2-trichloroethane trichloroethylene xylenes (total)

#### Herbicides

alachlor atrazine 2,4-D dinoseb

pentachlorophenol 2,4,5-TP (silvex)

#### **Pesticides**

carbofuran

dibromochloropropane (DBCP)

o-dichlorobenzene p-dichlorobenzene

endrin

ethylene dibromide (EDB)

heptachlor

heptachlor epoxide

lindane methoxychlor



### Filter Model CB6AD

Filter capacity is 750 gallons, which is approximately a 12 month supply depending on local water conditions.

Claims of capacity are not applicable to contaminants reduced by mechanical filtration because of broad variations in the quality and quantity of physical matter in your drinking water.

### 4.3: Performance Date Sheet

### **Performance Data Sheet**



Multipure Drinking Water Systems have been tested and certified under NSF/ANSI Standard Nos. 53 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.



### For Model No. MPAD

			Maximum permissible
		Influent challenge	product water
	Percent	concentration	concentration
Substance	Reduction <sup>™</sup>	(mg/L unless specified)	(mg/L unless specified)
ALACHLOR*	>98%	0.05	0.001
		10 <sup>7</sup> to 10 <sup>8</sup> fibers/L; fibers	
ASBESTOS	>99.9%	greater than 10	99% reduction
	070	micrometers in length	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

<sup>\*\*</sup>Percent reduction reflects actual performance of Multipure product as specifically tested (at 200% of capacity, i.e. 1500 gallons). Percent reduction shown for VOCs\* reflects the allowable claims for Volatile Organic Chemicals/Compounds as per Tables. Chloroform was used as a surrogate for VOC reduction claims: the Multipure Systems' actual reduction rate of Chloroform was >99.8% as tested (at 200% of capacity).

# 4.3: Performance Data Sheet (continued)

Substance	Percent Reduction**	Influent challenge concentration	Maximum permissible product water concentration
Substance	>99.95%	(mg/L unless specified)	(mg/L unless specified)
Giardia Lamblia (see CYST)	288.80%	minimum 50,000/mL	99.95%
HALOACETONITRILES (HAN)*	000/	0.000	0.0005
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):*	000/		0.0004
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
<b>LEAD</b> (pH 6.5)	>99.3%	0.15 +/- 10%	0.010
<b>LEAD</b> (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 CHLOROBENZENE)*	>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
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%	0.15	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*	98%	0.042	0.001
1,2,4 TRICHLOROBENZENE (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)* TRIHALOMETHANES (TTHM) (Chloroform; Bromoform;	>99%	0.180	0.0010
Bromodichloromethane; Dibromochloromethane)	>99.8%	0.300 +/- 0.30	0.015
TURBIDITY	>99%	11 +/- 1 NTU	0.5 NTU
Unsym-Trichlorobenzene (see 1,2,4-TRICHLOROBENZENE)*	>99%	0.160	0.0005
Vinylbenzene (see STYRENE)*	>99%	0.150	0.0005
XYLENES (TOTAL)*	>99%	0.070	0.001

### 4.3: Performance Data Sheet (continued)

### 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 (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
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%

Note: This addresses the U.S. Environmental Protection Agency (EPA) Primary and Secondary Drinking Water Regulations in effect at its time of publication, they relate to Multipure's performance in conformance to the industry performance criteria. These regulations are continually being updated at the Federal level. Accordingly, this list of MCLs will be reviewed and amended when appropriate. Please see sales brochure for list of product certifications.

### NOTES:

- 1. Multipure Drinking Water Systems have been certified, as indicated, by NSF International for compliance to NSF/ANSI Standard Nos. 42 & 53.
- 2. The Multipure Drinking Water Systems have been certified by the State of California Department of Public Health for the reduction of specific contaminants listed herein.
- 3. Chloroform was used as a surrogate for claims of reduction of VOCs. Multipure 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 of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.
- 5. Filter life will vary in proportion to the amount of water used and the level of impurities in the water being processed. For optimum performance, it is essential that the filter be replaced on a regularly scheduled basis as follows: (a) annually; (b) when the unit's rated capacity has been reached; (c) the flow rate diminishes; or (d) the filter becomes saturated with bad tastes and odors.
- 6. Multipure's Aquadome Housing is warranted for a lifetime (provided that filter has been changed at least once per year). All exterior hoses and attachments to the System are warranted for one year. Please see the Owner's Manual for complete product guarantee and warranty information.
- 7. Please see the Owner's Manual for installation instructions and operating procedures.
- 8. 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 Multipure unit with your actual water treatment needs.
- 9. While testing was performed under standard laboratory conditions, actual performance may vary.
- 10. The list of substances which the treatment device reduces does not necessarily mean that these substances are present in your tap water.



Model No: MPAD

Operational Specifications	MPAD
Approximate Service Capacity	750 gallons
Replacement Filter Type	CB6AD
Approximate Flow Rate @ 60 psi	0.75 gpm
Maximum Water Pressure	100 psi/7.0 kg/cm2
Minimum Water Pressure	30 psi/2.1 kg/cm2
Maximum Operating Temperature	100°F/38°C for cold water use only
Minimum Operating Temperature	32°F/0°C

#### 4.4: California Certification Department of Public Health

State of California Department of Public Health

# Water Treatment Device Certificate Number 05 - 1736

Date Issued: October 20, 2010

**Trademark/Model Designation** 

Multi-Pure MPAD

Multi-Pure MPADC

**Replacement Elements** 

CB6AD

**CBTAD** 

Manufacturer: Multi-Pure Drinking Water Systems

The water treatment device(s) listed on this certificate have met the testing requirements pursuant to Section 116830 of the Health and Safety Code for the following health related contaminants:

### **Microbiological Contaminants and Turbidity**

Cysts

**Turbidity** 

**Inorganic/Radiological Contaminants** 

Asbestos

Lead

Mercury

### **Organic Contaminant**

**PCB** 

Toxaphene

**VOCs** 

Chlordane

**MTBE** 

Rated Service Capacity: 750 gals Rated Service Flow: 0.75 gpm

### **Conditions of Certification:**

Do not use where water is microbiologically unsafe or with water of unknown quality, except that systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

# 4.5: Troubleshooting

Issue	Solution
Odor – rotten eggs, no discoloration on	A rotten egg odor is a sign that $H_2S$ (hydrogen sulfide) gas is present in your water source.
the filter	If hydrogen sulfide gas is present in your water source, it is recommended that you rotate DWS usage between 2 filter cartridges. When the DWS emits the rotten egg smell, remove the filter and allow it to dry upside down to allow the gas to dissipate (the filter can be reused once dry). Use the second filter in the unit while the first filter is drying.
Odor – rotten eggs, with discoloration on the filter	A rotten egg odor is a sign that H <sub>2</sub> S (hydrogen sulfide) is present in your water source. Filter discoloration can determine the source:  orange/brownish colors – iron blackish colors – manganese slimy/blotchy colors – decaying organisms  When hydrogen sulfide comes from a source that discolors the filter cartridge and creates a strong rotten egg odor, the only recommended solution is to change the filter cartridge.
Color – milky color	Milky color in the water is typically caused by air bubbles in the water. Higher than normal water pressure through
in the water	the DWS can create these small air bubbles, but they do not affect system performance.
	For countertop systems, turn on the water and engage the diverter valve while slightly reducing the water flow. Less water pressure through the system can prevent air bubbles from forming.
Color – black color in the water	Black color in the water is typically caused by residual carbon dust from the filter.
III tile water	Allow water to run through the DWS for approximately 30 minutes to flush the filter. Residual carbon dust may initially color the water black.
Flow rate – the water flow rate is slow	The filter is designed to restrict its flow rate when clogged with particulates or other solid contaminants.
How rate is slow	When the water flow rate slows to the point of inconvenience, it is time to replace the filter cartridge. If other water sources are on while using the DWS, turn them off to check if they are affecting the flow rate.
Taste/Odor – miscellaneous	The carbon block filter may have become saturated with the tastes and odors treated in your drinking water.
Illiscellalleous	To resolve this, change the filter.
Bypass lever – sticking (hard to move)	Minerals in the water can build up on the diverter valve, causing the bypass lever to stick and preventing the buttons from being pressed easily.
	A sticking bypass lever can be solved by lubricating it or by dissolving the mineral deposits.  Lubrication – requires vegetable oil; because lubrication does not dissolve the mineral deposits, it may need to be performed periodically.  1. Unscrew the diverter valve and remove from the faucet.  2. Pour a small amount of vegetable oil in the inlet hole.  3. Push the left and right buttons on the diverter valve several times to lubricate it thoroughly.  4. Reconnect the diverter valve to the faucet.  Dissolving – requires vinegar; may cause discoloration to the metal.
	Unscrew the diverter valve and remove from the faucet.     Soak the diverter valve in a bowl of vinegar for 10 minutes.     Rinse the diverter valve and reconnect to the faucet.
Bypass lever – stuck (cannot be pressed)	The bypass lever can occasionally become stuck due to the presence of air in the tubing. This can prevent the buttons from being pressed.
	<ol> <li>Unscrew the diverter valve and remove from the faucet.</li> <li>Press the left and right buttons to test it. If they press in easily, then removing the diverter valve freed the air in the tubing.</li> <li>Reconnect the diverter valve to the faucet.</li> </ol>

# 4.6: Frequently Asked Questions

Question	Answer
Will low pH or acidic water affect the filter?	No. Mineral components can determine the pH of water, and minerals dissolved in solution in the water pass through the system unfiltered.  • pH 7 = neutral  • pH > 7 = alkaline  • pH < 7 = acidic
Does deionized water or soft water have an effect on Multipure water?	No. Because Multipure filters do not treat the natural minerals dissolved in water, the hardness or softness of water has no effect on the resultant filtered Multipure water.
Can the Multipure system be connected to an icemaker?	The Aquadome cannot be connected to an icemaker, although Multipure below sink Drinking Water Systems (Aquaversa, Aquaperform) can be connected to the sink, refrigerator, water dispenser, or icemaker.
Can the Multipure system be used during an emergency	Yes. During an emergency or when the source water is off, you can hand pump or siphon water through the Multipure system.
or when the water is turned off?	CAUTION: The Multipure system is not intended for use where the water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. To disinfect questionable source water, add 1/4 tsp. of household bleach per gallon of source water, the Multipure system will remove this solution from the water during the filtering process. Hand pump kits and emergency kits are available from Multipure.
What causes white particles to appear in Multipure water when it is frozen or boiled?	Because the Aquadome does not reduce any natural minerals present in water, these minerals may solidify when the water is frozen and appear as white flakes or specks when the water is melted or boiled.
when it is frozen or polled?	Many natural minerals in water are beneficial to your health, and their existence in drinking water (in normal quantities) is not cause for alarm. Minerals can be removed by Reverse Osmosis technology, which is available through the Multipure AquaRO Drinking Water System.
Why does the Multipure system reduce Volatile Organic Chemicals, but not natural minerals?	Minerals are dissolved in solution and do not have an actual physical size; thus, the minerals pass through the system unfiltered.
Should sediment be removed with a standard filter first?	In areas with excessive sedimentation, pre-filtration can help extend the operational efficiency of the Multipure filter; however, in most areas it is unnecessary.
intermet:	Multipure Drinking Water Systems utilize a double-filter mechanic. The outer material is a pre-filter that protects the solid carbon block from prematurely clogging with large sediment.
Why is the compressed solid carbon block filter more efficient that (loose) granular activated carbon filters?	Multipure's densely compacted solid carbon block filters force water through microscopic pores of carbon — much smaller than those of granular activated carbon — thus more effectively reducing particulate matter and contaminants that affect the taste and odor of the water.
What is the difference between a "water softener" and a Multipure Drinking	Water softeners are not designed to treat drinking water for contaminants; instead, they are designed to adjust the hardness (mineral content) of the water. Multipure systems do not remove dissolved minerals from the water, because natural minerals often found in water are considered beneficial to good health.
Water System?	Soft water is often desirable for bathing and laundering purposes, and may extend the life of hot water heaters and boilers. However, soft water is not recommended for use on plants or lawns. Multipure recommends that you bypass a water softener when installing your Multipure Drinking Water System.
Can the Multipure Drinking Water System be used with untreated water?	Questionable water sources should be disinfected prior to use. To disinfect questionable source water, add 1/4 tsp of household bleach per gallon of source water; the Multipure system will remove this solution from the water during the filtering process.
	Multipure systems are designed to be used with municipally treated water, they are not intended to be used where the water 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.

# For instructions in Spanish, please see Spanish Manual Be sure to replace your filter at least once a year or sooner, if needed.

Date of Installation:
Fecha de Instalación
Unit Model Number:
Tipo de Unidad
Filter Type:
Tipo de Filtro
Dates of Filter Change / Fechas de Cambio del Filtro

To order a Replacement Filter

Call 800.622.9208

or

www.multipure.com/rf.html



**Multipure International** 

Las Vegas Technology Center 7251 Cathedral Rock Drive Las Vegas, NV 89128 800.622.9206

email: headquarters@multipure.com