ADVANTAGE

Advantage is a point-of-use drinking water system that produces great tasting water that is free of fluoride, chlorine, lead, heavy metals, MTBE, VOCs and contaminants, while maintaining pH (alkalinity) and dissolved minerals. The system features three activated carbon (granulated and advanced carbon block) filters, 3 pounds of KDF media, bone char fluoride filtration, and .5 micron microfiltration technology that removes up to 99.5% of mercury, lead, giardia, cryptosporidium, entamoeba, and toxoplasma cysts to ensure contaminant-free water.

Advantage uses four advanced filtration components to provide six filtration stages, using three 10" vertical filters and one horizontally mounted 5 micron sediment inline filter. Tubing, designer faucet, a John Guest quick connect for the faucet and a John Guest ball valve to allow easy water shut off for filter flushing and future filter changes are all included.

Included Components:

1. Triple filter wall mount housing that can be installed under a sink or in a basement with a 5 micron sediment filter horizontally mounted on the frame.

- 2. Inline horizontally mounted 5 micron sediment filter. (Stage 1)
- 3. 10" bone char fluoride adsorption filter. (Stage 2)
- 4. 10" 3 lb KDF media / 0.6 lb granulated activated carbon filter. (Stage 3 & 4)

5. 10" .5 micron carbon microfiltration filter that removes MTBE, VOCs and chlorine, with 99.5% removal of lead and mercury. (Stage 5 & 6)

6. Brushed nickel lead-free ceramic disk designer faucet with normal sink installation components, including a John Guest quick connect that is screwed onto the end of the faucet for fast and easy connection of the blue tubing from the output of the system.

7. Quick connects throughout for all $\frac{1}{4}$ " tubing connections, including on the beautiful brushed nickel ceramic disk designer faucet.

8. Two 5 foot lengths of flexible LLDPE ¹/₄" BPA free tubing – one blue, and one red. Red is used to connect to the cold water source and to the John Guest ball valve (shutoff valve) installed in the input of the 5 micron horizontally mounted inline sediment filter. The blue tubing is connected to the output on the right side of the system and to the supplied John Guest quick connect that is screwed onto the bottom of the supplied faucet.

9. John Guest ball valve shut-off valve, to make it easy to shut off water to the system for initial filter flushing and future filter changes, connected to the input of the horizontally mounted 5 micron sediment filter.

10. Filter Wrench, to enable easy opening of the filter housings (the three vertical components).



OPUS Healthy Water Systems

Available at Aviva

1224 St. James St. Winnipeg, Manitoba Canada R3H 0L1

Phone: 204.947.6789

Fax: 204.947.6786

www.opus.net water@avivahealth.com

FILTRATION UNIT DESCRIPTION:

Stage 1 – Horizontally Mounted 5 Micron Activated Carbon Block Sediment Filter. This is an inline plastic filter horizontally mounted on the top of the system with plastic clips. Under normal use, this filter should last a year; however, depending on the quantity of water purified and the level of sediment in your water, it may require changing more often. Replace this filter if the water pressure drops to an unacceptable level, but at minimum it must be changed annually.

• This filter is labeled **Stage 1 – 5 Micron Sediment Filter**.

Stage 2 – Bone Char Fluoride Filter. This is the left vertical stage of the three vertically mounted filters. This filter is specifically designed to remove fluoride. Replace this filter annually.

• The metal frame above this filter is labeled **Stage 2 – Bone Char Fluoride Filter**.

Stage 3 & 4 – 3 lb KDF Media / 0.6 lb GAC. This is the middle, or centre vertical stage of the unit. This filter consists of two components (two stages), including the equivalent of 3 pounds of KDF media and over half a pound of granulated activated carbon (GAC). KDF media is a copperzinc formulation that combines electrochemical and catalytic technology to remove chlorine, lead, mercury, iron, aluminum, arsenic, chromium, copper, manganese, nickel, chloroform, trichloroethane, lindane, nitrates, nitrites and hydrogen sulfide from water. KDF media has a mild antibacterial, algaecitic, and fungicitic effect and may reduce the accumulation of lime scale. Replace this filter annually.

• The metal frame above this filter is labeled **STAGE 3 & 4 – 3 lb KDF/GAC**.

Stage 5 & 6 – .5 Micron MTBE/VOC/lead/mercury microfilter. This is the right vertical stage of the unit, and consists of a .5 micron carbon block microfiltration filter with multiple functions described below. Replace this filter annually.

- Traps carbon and KDF media particles from the KDF/GAC filter in stage 3 & 4, and bone char particles from the stage 2 fluoride filter. (Stage 5)
- Removes chlorine, odors, dissolved and particulate lead, mercury (99.5% removal rate for lead and mercury), cysts, giardia, cryptosporidium, entamoeba and toxoplasma cysts. A unique feature of this filter is the filtration of MTBE and VOCs contaminants that very few filtration systems can remove. (Stage 6)
- The metal frame above this filter is labeled **Stage 5 & 6 .5 Micron MTBE/VOC Filter**.

NOTE ABOUT QUICK CONNECTS:

All OPUS water purification systems utilize quick connects for all tubing connections, including the connection to the John Guest ball valve (shutoff valve), faucet (there is a small gray piece with the quick connect supplied with the faucet) and input and output of the water filtration system. The quick connect allows easy insertion and removal of 1/4" tubing. To remove the tubing, you must hold in the "ring" or collar that is on the outside of the tubing (the ring or collar surrounds the tubing and is part of the quick connect). When you hold in the ring (sometimes you need a flathead screwdriver, but usually your finger will do) the tubing will easily slide out. If you try to pull out the tubing without holding in the ring, you can damage the quick connect fitting.

INSTALLATION INSTRUCTIONS

Step 1 – INSTALL THE SUPPLIED FAUCET TO YOUR SINK. Drill 5/8" hole if required.

If your sink or countertop doesn't have a hole for the supplied faucet, a 5/8" hole must be drilled to allow faucet installation. After the faucet has been installed, mount the unit under your sink or in a location that provides easy access for future filter changes.

Note 1: Most plumbers cannot drill into quartz, granite, or similar solid countertops for faucet installation. If you have a solid countertop, check with your installer to ensure he can drill into your countertop without risking damage. It's usually best to contact the countertop supplier or manufacturer to drill the 5/8" hole required for faucet installation if you have a solid countertop.

Note 2: Your installer must provide a connection to your cold water source. SharkBite U362 ¹/₂" TEE for the cold water connection, and a Dahl straight shut-off ball valve (1/2" PEX ¹/₄ " OD) are recommended. These are included if you choose an Aviva recommended plumber. If you choose to use your own plumber, these parts are available for \$42.00 plus tax.

The 5 foot length of ¹/₄" red tubing is used to connect the cold water source to the Advantage water input, which is the blue and white John Guest shut-off valve that is inserted into the water input on the right side of the horizontally mounted 5 micron sediment filter.

The 5 foot length of ¹/₄" blue tubing connects to the quick connect output on the right side of the Advantage unit, and to the quick connect on the faucet.

Important Note Regarding Filter Flushing

The Stage 3 & 4 KDF/GAC filter and the Stage 5 & 6 half (.5) micron microfiltration VOC/MTBE carbon filter must be removed from the middle and right vertical filter containers after receiving the system and re-installed with proper flushing, as described below. Failure to flush the system properly will result in damage to these filters.

STEP 2 – REMOVE THE FILTERS FROM THE CENTER AND RIGHT FILTER HOUSINGS, WHICH ARE STAGE 3 & 4 (MIDDLE) AND STAGE 5 & 6 (RIGHT) FILTERS

Using the supplied filter wrench, turn the white filter housings to the left to open, and remove the filters. The filters are labeled *Stage 3 & 4 (KDF/GAC)* and *Stage 5 & 6* on the metal frame above the filter housings. Labels and plastic should be removed from the filters when you receive the unit, but if there are labels or plastic on the filters, remove them prior to re-installing as described below.

After removing the filters, replace the empty filter housings by turning to the right. Ensure the Orings are visible in the groove in the filter containers before screwing them back onto the system. To begin filter flushing, only the Stage 2 fluoride filter should be installed in the left vertical housing.

STEP 3 – FLUSH THE BONE CHAR FLUORIDE FILTER

 Make sure you have removed the KDF/GAC filter from the middle filter container and the .5 micron VOC/MTBE filter from the right filter container. Only the bone char fluoride filter should be installed in the left vertical container for initial flushing. The filter housings in the middle and right containers should have been shipped with labels to remind you to remove these filters prior to flushing.

- 2. The red ¹/₄" tubing should be connected to the cold water supply and to the John Guest ball valve connected to the horizontally mounted stage 1 sediment filter on the top of the system.
- 3. The blue $\frac{1}{4}$ " tubing is connected to the right side of the unit (stage 5 & 6), and to the faucet.

4. Open the John Guest ball valve to allow water to flow into the system, and turn the handle on the faucet downwards to allow water to pass through the faucet. Water will enter the horizontally mounted 5 micron sediment filter, through the bone char fluoride filter installed in the first vertical stage, through the two empty vertical filter housings and to the faucet. Let water run through the system for 15 minutes.

STEP 4 – FLUSH STAGE 3 & 4 KDF/GAC FILTER (install in center filter housing after flushing fluoride filter)

1. After you have flushed the fluoride filter for 15 minutes, turn off the water to the system using the John Guest ball valve that is connected to the stage 1 horizontally mounted 5 micron sediment filter. Keep the faucet open to ensure there is no water flowing through the unit.

2. Remove the filter housing from the center position using the supplied filter wrench. Dump out the water (it's easiest to do this with a bucket under or near the unit) and install the KDF/GAC Stage 3 & 4 filter. The upper part of this filter is black (GAC), and the bottom third is a gold color (KDF media). Remove any paper or cellophane wrapping on the filter before installing. Ensure that the rubber washer is facing up on all filters.

3. Turn on the water using the John Guest ball valve connected to the stage 1 sediment filter, and let the water run for 15 minutes to flush the activated carbon particle dust from the filter.

STEP 5 – INSTALL THE .5 MICRON MICROFILTRATION FILTER IN POSITION 3 (STAGE 5 & 6)

1. After you have flushed the KDF/GAC filter as described in Steps 3 and 4, turn off the water to the system by closing the John Guest ball valve installed in the stage 1 sediment filter. Keep the faucet open to ensure no water is flowing through the unit.

2. Unscrew the Stage 5 & 6 right vertical filter container using the supplied filter wrench and install the .5 micron MTBE/VOC carbon block microfiltration filter (Stage 5 & 6, white in color with green rings on each end). Make sure you remove any plastic wrapping (if present) before installation.

You can install this filter in either direction as there are rubber washers on both sides. Remember to install the other filters (KDF/GAC and bone char) with the rubber washers facing upwards.

3. Turn on the water to the system by opening the John Guest ball valve. Check for leaks. Run water through the system for 10 minutes. You can now enjoy great tasting water, rich in minerals, and free of chemicals, fluoride, chlorine, VOCs, etc. Sometimes there is some dissolved oxygen in the water when filters are new which could make the water appear cloudy for up to two weeks, but this will dissipate as the water stands.

Options for Advantage:

- .01 Micron Nanofiltration Filter (filters viruses, bacteria, protozoa) \$100.00
- Ultraviolet Germicidal Filter with upgrade to flow restricted .5 Micron VOC Filter \$269.99
- Upgrade to 11" ceramic NSF certified designer water filtration faucet \$60.00
- John Guest Union "T" to allow connection to a refrigerator or second tap \$5.00
- Note: Additional ¹/₄" tubing @ \$1.00 per foot would be required for connection to a second water output.

Advantage Description

PLU	Model	Height	Width	Depth	Flow Rate	Description	Price
19732	Advantage	17"	17"	6"	2 - 4 Litres	4 filter, 6 stage water purification system, with .5 micron	\$499.99
	_				Per	micro-filtration, chlorine, heavy metal, fluoride, VOC,	
					Minute	MTBE, major contaminant and chemical filtration.	

Filter Change Information

PLU	Model	Stage	Location	Function	Change Every	Price
23788	OPUS Inline Sediment	1	Horizontal	5 Micron Sediment Filtration	6 - 12 Months	\$40.00
17800	Bone Char Fluoride filter	2	Left Vertical	Fluoride Filtration Using Bone Char	1 Year	\$70.00
9395	3 lb. KDF / .6 lb. GAC	3 & 4	Centre Vertical	Chlorine, Heavy Metals, THMs	1 Year	\$120.00
14256	.5 Micron Carbon, MTBE	5&6	Right Vertical	Chlorine, Lead, Mercury, MTBE,	1 Year	\$50.00
	& VOC Removal		_	VOC, microfiltration to .5 microns		
17560	Annual Filter Change	All	All	Annual Kit with all 4 Filters	1 Year	\$280.00

Winnipeg Installation Options

13824	Standard Drinking Water System, Under Counter Installation, with included faucet, within Winnipeg City Limits	\$150.00
17549	Minimum Additional Charge for Basement Install, one floor below kitchen sink. Including up to 40 ft 1/4" tubing	\$100.00
19760	Annual Filter Change, on-site (not including filters, which are priced above) including filter flushing as required	\$90.00
22697	Filter change, including removal of filters, installation of new filters, and flushing, at Aviva location (all models)	\$50.00
18053	SharkBite 1/2" TEE (combine with PLU 18052 for highest quality installation)	\$16.00
18052	1/2" PEX 1/4" OD DAHL Straight Ball Valve (combine with 18053 for highest quality installation)	\$26.00
18054	Saddle Valve to connect 1/4" Tubing to Copper Cold Water Pipe & to System (SharkBite & Dahl Valve recommended)	\$8.50
11852	1/4" John Guest Union "T" to allow two outputs from one input, to allow connection to a refrigerator, second tap, etc.	\$5.00
	1/4" BPA Free Linear Low Density Polyethylene Tubing (LLDPE), per foot (White (9678), Blue (9679), or Red (9680))	\$1.00

ANNUAL COST OF OPERATION: APPROXIMATELY \$280.00 MONTHLY COST OF OPERATION: \$23.33 WEEKLY COST OF OPERATION: \$5.38 DAILY COST OF OPERATION: \$0.77 COST PER GALLON: \$0.14 COST PER LITRE: \$0.03 (BASED ON 5 GALLONS PER DAY) 5 YEAR LIMITED WARRANTY

Designed, Engineered, and Tested by Nathan Zassman, President Opus Water Purification Systems