

## **Performance Data Sheet**

WATER QUALITY

**Carafe Model** 

AT100, AT110, AT120, AT130 and AT140 are

R&T according to NSF/ ANSI Standard 42, 53, 58, 372 & 401. (For the

reduction of the claims specified below).

certified by IAPMO

Product: AquaTru Carafe Model AT100, AT110, AT120, AT130, and AT140, / Use Guidelines:

The AquaTru Carafe® water purifier requires regular replacement of all filters to operate properly. The pre-filter needs to be changed every 300 gallons; the VOC filter every 300 gallons. The expected life of the Reverse Osmosis Filter is 24 Months or approximately 600 Gallons. Your water quality may affect filter life and replacement frequency.

This system and its filters have been tested according to NSF/ANSI372 Lead Free and found within acceptable levels.

See manual for explanation of performance indication data. Please be aware that:

- Not all contaminants listed may be present in your water.
- AquaTru Carafe® may not remove all contaminants that may be present in your tap water.
- AquaTru Carafe® is only to be used with cold water.
- AquaTru Carafe® usage must comply with all state and local laws.
- Testing was performed under standard laboratory conditions; actual performance may vary.
- Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.
- Spent absorption media will not be reactivated and used.

**CAUTION!** 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.

Operating Parameters <sup>1</sup>	Imperial	Metric Units			
Input Power	120 Volt ~ 60 Hz	120 Volt ~ 60 Hz			
Temperature	39-100° F	4-38° C			
Rated Flow Rate					
Minimum Application Pressure	56 PSI				
	Inlet Water Quality Limits				
Total Dissolved Solids (TDS)		1500 mg/L			
Maximum Hardness <sup>2</sup>		10 gpg (171 mg/L)			
Sulphide, Iron, and Manganese		<0.1 mg/L			
Chlorine		<2 ppm			
рН		3-11			
Turbidity		5 NTU Max.			
	Daily Production Rate - 35 GPD	Efficiency³ – 63%			

<sup>1.</sup> While testing was performed under standard laboratory conditions, actual performance may vary depending on water pressure, temperature, other substances, water quality and other conditions.

## **Performance Data Sheet**

The concentration of the indicated substances in water was reduced to a concentration less than or equal to the permissible levels as specified in N SF/A NSI 42, 53 and 58. Organic chemicals included by surrogate testing.

NSF/ANSI 53 Substance	Influent Challenge Concentration (mg/L)	Maximum Permissible Product Water Concentration (mg/L)	Minimum Reduction
Alachor	0.05	0.001	>98%
Atrazine	0.1	0.003	>97%
Benzene	0.081	0.001	>99%
Carbofuran	0.19	0.001	>99.5%
Carbon Tetrachloride	0.078	0.0018	98%
Chlorbenzene	0.077	0.001	>99%
Chlorpicrin	0.015	0.0002	99%
2,4-d	0.11	0.0017	98%
Dibromochloropropane (Dbcp)	0.052	0.00002	>99%
O-Dichlorobenzene	0.08	0.001	>99%
P-Dichlorobenzene	0.04	0.001	>98%
1,2-Dichloroethane	0.088	0.0048	95%
1,1-Dichloroethylene	0.083	0.001	>99%
Cis-1,2-Dichloroethylene	0.17	0.0005	>99%
Trans-1,2-Dichloroethylene	0.086	0.001	>99%
1,2-Dichloropropane	0.08	0.001	>99%
Cis-1,3-Dichloropropylene	0.079	0.001	>99%
Dinoseb	0.17	0.0001	99%
Endrin	0.053	0.00059	99%
Ethylbenzene	0.088	0.001	>99%
Ethylene Dibromide (Edb)	0.044	0.0002	>99%
Haloacetonitriles (Han):	0.022	0.0005	98%

other conditions.

2. If the hardness of your water is above 10 gpg (171 mg/L), lime scale will build up rapidly on the membrane inside of the RO membrane cartridge. Scale build up will plug the RO membrane cartridge and make the system ineffective. We do not recommend the AquaTru to be used with water in excess of 10 gpg (171 mg/L) hardness, unless the water is softened prior to the reverse osmosis system.

<sup>3.</sup> 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.

NSF/ANSI 53 Substance	Influent Challenge Concentration (mg/L)	Maximum Permissible Product Water Concentration (mg/L)	Minimum Reduction
Haloketones (Hk): 1,1-Dichloro-2- propane	0.0072	0.0001	99%
1,1,1-Trichloro-2-propane	0.0082	0.0003	96%
Heptachlor	0.025	0.00001	>99%
Heptachlor Epoxide	0.0107	0.0002	98%
Hexachlorobutadiene	0.044	0.001	>98%
Hexachlorocyclopentadiene	0.06	0.000002	>99%
Lindane	0.055	0.00001	>99%
Methoxychlor	0.05	0.0001	>99%
Pentachlorophenol	0.096	0.001	>99%
Simazine	0.12	0.004	>97%
Styrene	0.15	0.0005	>99%
1,1,2,2-Tetrachloroethane	0.081	0.001	>99%
Tetrachloroethylene	0.081	0.001	>99%
Toluene	0.078	0.001	>99%
2,4,5-tp (Silvex)	0.27	0.0016	99%
Tribromoacetic Acid	0.042	0.001	>98%
1,2,4-Trichlorobenzene	0.16	0.0005	>99%
1,1,1-Trichloroethane	0.084	0.0046	95%
1,1,2-Trichloroethane	0.15	0.0005	>99%
Trichloroethylene	0.18	0.001	>99%
Trihalomethanes (Includes):			
Chloroform (Surrogate Chemical) Bromoform Bromodichloromethane Chlorodibromomethane	0.3	0.015	95%
Xylenes (Total)	0.07	0.001	>99%

NSF/ANSI 58 Substance	Influent Challenge Concentration (mg/L)	Maximum Permissible Product Water Concentration (mg/L)	Reduction Requirements	Minimum Reduction	Average Reduction
Arsenic (pentavalent) <sup>4</sup>	0.05 +/- 20%	0.01	80%	97.2%	98.8%
Barium	10.0 +/-10%	2	80%	93.8%	95.4%
Copper	3+/- 3%	1.3	57%	91.2%	96.8%
Cyst <sup>5</sup>	≥ 50,0000	N/A	99%	99.9%	99.9%
Fluoride	8 +/- 10%	1.5	81%	94.2%	96.4%
Hexavalent Chromium	0.3 +/- 10%	0.1	66%	90.1%	97.5%
Lead	0.15 +/-10%	0.005	96%	98%	99.2%
Nitrate <sup>6</sup> (as N)	27.0 +/- 10%	10	N/A	97.5%	98.3%
Nitrate Plus Nitrite (both as N)	30.0 +/- 10%	10	<10mg/L	98%	93.9%
Nitrite (as N)	3.0 +/- 10%	1	66%	97.4%	90.2%
Perchlorate	0.10 +/- 10%	0.006	94%	97.2%	98.3%
Radium <sup>7</sup> 226/228	25pCi/L +/- 10%	5pCi/L	80%	88%	96.4%
Selenium	0.10 +/- 10%	0.05	50%	92.6%	98.1%
TDS	750 +/- 30	22	75%	94.5%	94.4%
Trivalent Chromium	0.3 +/-30%	0.1	66%	99%	99.6%

This system has been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenate) at concentration of 0.050 mg/L 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.
 Includes Giardia Lamblia, Entamoeba Histolyca and Cryptosporidium.
 All Nitrate Testing was conducted at 50 PSI.
 Based upon testing methods using Barium as a surrogate. All concentrations in pico-Curie/L (pCi/L).



NSF/ANSI 42 Substance	Reduction Requirement	Influent Challenge Concentration	Maximum Permissible Product Water Concentration
Chlorine Reduction, Free Available	50%	2.0 +/- 0.2ppm	NA
Chloramine Reduction, Free Available	83.3%	3.0 +/- 0.2ppm	0.5 mg/L

## **Replacement Filters**

- Pre/Carbon Filter SKU 10AT100SF01. Replace every 6 months or 300 gallons, whichever comes first.
- Reverse Osmosis Membrane SKU 10AT100RF01. Replace every 24 months or 600 gallons, whichever comes first.
- VOC filter SKU 10AT100VF01. Replace every 12 months or 300 gallons, whichever comes first.
- VOC Carbon with PH+ Mineral Boost filter SKU 10AT100VFA01. Replace every 12 months or 300 gallons, whichever comes first.

Before use, read and understand the owner's manual for installation & operating instructions as well as the manufacturer's limited warranty. Note: The manufacturer is required to re-test the product every 5 years for material safety, structural integrity, and all performance claims made. Any potential changes to the product are required to be submitted to the certification agency for technical review and approval prior to implementation. For technical questions regarding the use of this product, please contact our customer service specialists at contact below.

For technical questions regarding the use of this product, please contact our customer service specialists at 800-220-6570.

This 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 NSF/ANSI 401.

NSF/ANSI 401 Substance	Influent mg/L (+/-20%)	Minimum Required Reduction	Average Reduction
Meprobamate	400	>85%	99.7%
Phenytoin	200	>85%	99.5%
Atenolol	200	>85%	99.5%
Carbamazepine	1400	>86%	97.6%
TCEP	5000	>86%	98.5%
TCPP	5000	>86%	93.5%
DEET	1400	>86%	93.3%
Metolachlor	1400	>86%	99.2%
Trimethoprim	140	>86.2%	99.2%
Ibuprofen	400	>85%	97.5%
Naproxen	140	>86.2%	94.2%
Estrone	140	>86.2%	99.2%
Bisphenol A	2000	>85%	89.5%
Linuron	140	>86.2%	99.2%
Nonyl phenol	1400	>86%	99.2%

While a majority of regulated contaminants like Hexavalent Chromium and lead are measured in either milligrams or micrograms per liter, many contaminants covered by NSF/ANSI 401 are only found in trace amounts and thus are measured in a smaller increment known as nanograms per liter (ng/L). To put this in perspective, 1 ng/L is the equivalent of 1/1000th of a microgram per liter, which would be the same as 1 ounce in 7.5 billion gallons of water.

This system has been tested according to NSF Protocol 53 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 was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF Protocol 53.

NSF/ANSI 53	Influent Challenge	Maximum Permissible Product	Minimum Allowable	Average Reduction
Substance	Concentration	Water Concentration	Reduction	(300 gal)
Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS)	1.5 +/- 0.5 ppm	0.07 µg/L	86%	99%

## Arsenic Facts

Arsenic (abbreviated As) is found naturally in some well water. Arsenic in water has no color, taste, or odor. It must be measured by a laboratory 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 U. S. 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(V)), As(+3), and arsenate) and trivalent arsenic associated as (III), As(+3), and arsenate). 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) water treatment systems do not remove trivalent arsenic from water very well. RO systems are very effective at removing pentavalent arsenic. A free chlorine residual will pentavalent arsenic. One pentavalent arsenic to pentavalent arsenic. A combined chlorine residual (also called chloramine) may not convert all the trivalent arsenic permanganate will also change trivalent arsenic to pentavalent arsenic. The system was tested in a lab. Under testing conditions, 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 whether the system is working properly. The RO component of the [RO Filter number model number] system must be replaced [frequency] to ensure that the system will continue to remove



