

## **Performance Data Sheet**

IAPMO R&T

WATER QUALITY

Carafe Model

AT100, AT110, AT120, AT130 and AT140 are

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

reduction of the claims specified below).

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/ANSI 372 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.
- AguaTru 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	0.042 gpm	0.16 Lpm
	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%

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

  3. 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.

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The concentration of the indicated substances in water was reduced to a concentration less than or equal to the permissible levels as specified in NSF/ANSI 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%

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	0.3	0.015	95%
Bromodichloromethane Chlorodibromomethane			
Xylenes (Total)	0.07	0.001	>99%

This system has been tested according to NSF Protocol 53 and NSF Protocol 58 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 Protocol 53 and NSF Protocol 58.

NSF 53 and NSF 58 Substance	Influent Challenge Concentration	Maximum Permissible Product Water Concentration	Average Reduction (300 gal)
Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS)	1.5 +/- 20% ug/L	0.02 μg/L	99.9%
Perfluorononanoic acid (PFNA)	0.05+/- 20% ug/L	0.006 µg/L	98%
Perfluorohexane sulfonic acid (PFHxS)	0.3+/- 20% ug/L	0.02 µg/L	99.7%
Perfluoroheptanoic acid (PFHpA)	0.04+/- 20% ug/L	0.02 µg/L	97.6%

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	Average Reduction
Chlorine Reduction, Free Available	50%	2.0 +/- 0.2ppm	96.8%
Chloramine Reduction, Free Available	80%	3.0 +/- 0.2ppm	97.01%
Particulate Class I (2 0.5 µm - < 1 µm)	≥85%	8500000 Particles/mL	98.96%

## **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 ng/L (+/-20%)	Maximum Permissible Product Water Concentration (ng/L)	Average Reduction
Meprobamate	400	60	99.7%
Phenytoin	200	30	99.5%
Atenolol	200	30	99.5%
Carbamazepine	1400	200	97.6%
TCEP	5000	700	98.5%
TCPP	5000	700	93.5%
DEET	1400	200	93.3%
Metolachlor	1400	200	99.2%
Trimethoprim	140	20	99.2%
Ibuprofen	400	60	97.4%
Naproxen	140	20	99.3%
Estrone	140	20	99.3%
Bisphenol A	2000	300	99.5%
Linuron	140	20	99.2%
Nonyl phenol	1400	200	99.3%

<sup>\*</sup> 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.

NSF/ANSI 401 Substance	Reduction Requirement	Influent Challenge Concentration	Maximum Permissible Product Water Concentration µg/L	Average Reduction
Microplastics, Particles 0.5 to < 1 µm	≥85%	8500000 Particles/mL	NA	98.96%

## Arconic Eacte

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(+3), and arsenate) and trivalent arsenic (also called As(V)), As(+3), and arsenate) and trivalent arsenic as of 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. 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 [model number] system is designed to remove 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 w

