

# **Performance Data Sheet**

IAPMO R&T

WATER QUALITY

PLATINUM SEAL

RESEARCH AND

Countertop Model

AT2000, AT2010, AT2020, AT2030, AT2040 and AT2050 are certified by IAPMO R&T according to NSF/ANSI Standard 42, 53, 58, 372,

and 401. (For the reduction of

the claims specified below).

Product: AquaTru® Model AT2000, AT2010, AT2020, AT2030, AT2040, AT2050 / Use Guidelines:

The AquaTru® water purifier requires regular replacement of all filters to operate properly. The pre-filter needs to be changed every 600 gallons, the VOC filter every 600 gallons, and the reverse osmosis membrane needs to be replaced every 1200 gallons. Your water quality may affect filter life & replacement frequency.

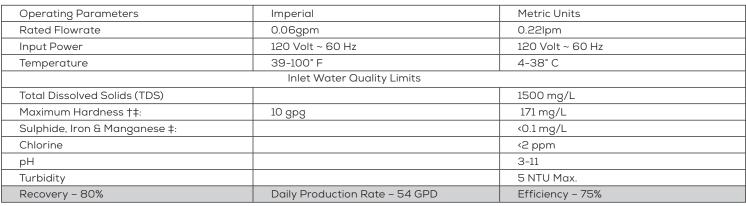
This system and its filters have been tested according to NSF/ANSI 372 and found within acceptable levels.

See manual for explanation of performance indications data.

#### Please be aware that:

- Not all contaminants listed may be present in your water.
- AquaTru® may not remove all contaminants that may be present in your tap water.
- AquaTru® is only to be used with cold water.
- AquaTru® 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.



<sup>†</sup> 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.

## 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 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	0.050	0.001	>98%
Atrazine	0.100	0.003	>97%
Benzene	0.081	0.001	>99%
Carbofuran	0.190	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	0.110	0.0017	98%
Dibromochloropropane (Dbcp)	0.052	0.00002	>99%
O-Dichlorobenzene	0.080	0.001	>99%
P-Dichlorobenzene	0.040	0.001	>98%
1,2-Dichloroethane	0.088	0.0048	95%
1,1-Dichloroethylene	0.083	0.001	>99%
Cis-1,2-Dichloroethylene	0.170	0.0005	>99%
Trans-1,2-Dichloroethylene	0.086	0.001	>99%
1,2-Dichloropropane	0.080	0.001	>99%
Cis-1,3-Dichloropropylene	0.079	0.001	>99%
Dinoseb	0.170	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):			
Bromochloroacetonitrile	0.022	0.0005	98%
Dibromoacetonitrile	0.024	0.0006	98%
Dichloroacetonitrile	0.0096	0.0002	98%
Trichloracetonitrile	0.015	0.0003	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	0.060	0.000002	>99%
Lindane	0.055	0.00001	>99%
Methoxychlor	0.050	0.0001	>99%
Pentachlorophenol	0.096	0.001	>99%
Simazine	0.120	0.004	>97%
Styrene	0.150	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)	0.270	0.0016	99%
Tribromoacetic Acid	0.042	0.001	>98%
1,2,4-Trichlorobenzene	0.160	0.0005	>99%
1,1,1-Trichloroethane	0.084	0.0046	95%
1,1,2-Trichloroethane	0.150	0.0005	>99%
Trichloroethylene	0.180	0.001	>99%
Trihalomethanes (Includes): Chloroform (Surrogate Chemical) Bromoform	0.300	0.015	95%
Bromotorm  Bromodichloromethane  Chlorodibromomethane	0.300	0.013	35%
Xylenes (Total)	0.070	0.001	>99%

NSF/ANSI 53	Influent Challenge	Maximum Permissible Product	Minimum
Substance	Concentration µg/L	Water Concentration µg/L	Reduction
Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS)	1.5 +/- 10%	0.02	97.5%

NSF/ANSI 58 Substance	Influent Challenge Concentration mg/L	Maximum Permissible Product Water Concentration mg/L	Reduction Requirements	Minimum Reduction	Average Reduction
Arsenic (pentavalent)	0.050 +/- 10%	0.010	N/A	95.8%	98.0%
Barium	10 +/- 10%	2	N/A	88.0%	96.4%
Hexavalent Chromium	0.30 +/- 10%	0.10	N/A	94.3%	97.2%
Trivalent Chromium	0.3 +/- 10%	0.10	N/A	92.3%	98.0%
TDS	750 +/- 20	22	75%	75.7%	87.1%
Copper	3 +/-10%	1.3	N/A	90.6%	95.2%
Cyst <sup>3</sup>	≥ 50,0000 ms/L	N/A	99.95%	99.99%	99.99%
Fluoride	8 +/- 10%	1.5	N/A	91.8%	93.5%
Lead	0.15 +/- 10%	0.010	N/A	97.5%	99.1%
Nitrate Plus Nitrite (both as N)	30.0 +/- 10%	10.0	N/A	70.0%	89.9%
Nitrate (as N)	27.0 +/- 10%	10.0	N/A	70.0%	87.2%
Nitrite (as N)	3.0 +/- 10%	1.0	N/A	77.4%	90.2%
Perchlorate	0.10 +/- 10%	0.006	N/A	95.0%	98.5%
Radium² 226/228	25pCi/L +/- 10%	5pCi/L	N/A	88.0%	96.4%
Selenium	0.10 +/- 10%	0.05	N/A	95.7%	98.1%

<sup>5.</sup> Efficiency rating means the percentage of the final factors approximate typical daily usage.

6. This system has been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenate) at contrations 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.





While testing was performed under standard laboratory conditions, actual performance may vary depending on water pressure, temperature and other substances, water quality and other conditions.
 Based upon testing methods using Barium as a surrogate. All concentrations in pCi/L pico curie/L.
 Includes Giardia lamblia, Entamoeba histolyca and Cryptosporidium.
 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.

5. 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

NSF/ANSI 42 Substance	Reduction Requirement	Influent Challenge Concentration	Average Reduction
Chloramine Reduction, Free Available	N/A	3.0 mg/L ±10%	96%
Chlorine Reduction, Free Available	≥50%	2.0 mg/L ±10%	97%
Particulate Class I (2 0.5 µm - < 1 µm)	≥85%	1400000 Particles/mL	96.48%

#### **Replacement Filters**

- Pre/Carbon Filter Part #AT2001. Replace every 6 months or 600 gallons, whichever comes first.
- Reverse Osmosis Membrane Part #AT2002. Replace every 24 months or 1200 gallons, whichever comes first.
- VOC filter Part #AT2003. Replace every 12 months or 600 gallons, whichever comes first.
- VOC Carbon with PH+Mineral Boost filter Part #AT2004. Replace every 12 months or 600 gallons, whichever comes first.

Before use, read and understand owner's manual for installation & operating instructions as well as 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.

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	Maximum Effluent Concentration ng/L	Average Reduction
Meprobamate	424	60	92.9%
Phenytoin	230	30	95.7%
Atenolol	230	30	95.7%
Carbamazepine	1500	200	93.3%
TCEP	5780	700	91.4%
TCPP	5276	700	90.5%
DEET	1500	200	93.3%
Metolachlor	1450	200	93.1%
Trimethoprim	145	20	93.1%
lbuprofen	410	60	95.1%
Naproxen	145	20	96.6%
Estrone	145	20	96.6%
Bisphenol A	2040	300	99.0%
Linuron	150	20	86.7%
Nonyl phenol	1500	200	96.7%

<sup>\*</sup> While a majority of regulated contaminants like Hexavalent Chromium and lead are measured either in 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	Reduction	Influent Challenge	Average
Substance	Requirement	Concentration	Reduction
Microplastics, Particles 0.5 to < 1 µm	≥ 85%	1400000 Particles/mL	96.48%

### 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/sofewater/arsenic.html. There are two forms of arsenic: pentavalent arsenic (also called As(II), 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) 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 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. To 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 syste

