



Performance Data Sheet

Pro 400 HR



**This system has been tested according to NSF/ANSI 58, 372 and CSA B483.1 for reduction of 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 58. The substances are:
Arsenic (V), Chromium (III), Lead and TDS.**

This reverse osmosis system contains replaceable treatment components, critical for the effective reduction of total dissolved solids. It is the user's responsibility to, and the manufacturer strongly recommends that the user, periodically have the product water tested to verify the system is performing properly.

If Pro 400 HR filters and membrane elements are not used, health related contaminant reduction claims are invalid.

SPECIFIC CONTAMINANT PERFORMANCE

Contaminants	Influent (avg. mg/L)	Effluent (ave. mg/L)	Effluent (max. mg/L)	Ave. % reduction
Arsenic (V) ¹	0.2731	0.002	0.0173	99.3
Chromium (III)	0.2864	0.0013	0.0067	99.5
Lead	0.1474	0.0005	0.00091	99.7
TDS	752	43.5	-	94.2

1 – This system has been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenate) at concentrations of 0.30 mg/L or less.

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 chloramines (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic. Please see the Arsenic Facts section of this performance data sheet.

Testing performed under standard laboratory conditions. Actual results may vary

SPECIFIC PERFORMANCE RATING

Product Water Production	659 Gallons Per Day (2495 Liters Per Day)
Average System Recovery	43.4%
Average System Efficiency	45.1%

Average System Recovery is 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 operated as designed (without a pressurized storage tank).

Average System Efficiency rating is 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.

System efficiency rating is identical to recovery rating when the system is tested without a storage tank or when the storage tank is bypassed.

SYSTEM SPECIFICATIONS AND OPERATING PARAMETERS

Inlet Water Condition	Minimum	Maximum
Pressure	29 psi (2 bar)	145 psi (10 bar)
Flow	10 L/min	-
TDS	0 mg/L	1500 mg/L
Conductivity	0 µS/cm	2000 µS/cm
Temperature	35.6 °F (2 °C)	95 °F (35 °C)
Hardness	0 mg/L	200 mg/L
Iron (II)	0 mg/L	1.5 mg/L
Iron (III)	0 mg/L	0.3 mg/L
Turbidity	0 FNU	0.5 FNU

Actual system performance will vary depending on varying water temperature and pressure, TDS levels and inlet water chemistry. Operating the system in water conditions outside the minimum or maximum operating parameters may result in reduced system performance and membrane element life.

Warning: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

RO SYSTEM & FILTRATION COMPONENTS

Prefilter I	Sediment Filter	919240002
Prefilter II	Granulated Activated Carbon Filter	919240003
Membrane	High Rejection Membrane	150718900-SP
Refer to Owner's Manual for electrical requirements, installation instructions and servicing/replacement component recommendations.		

WARRANTY

Bluewater Limited Warranty

1. The Limited Warranty

The Bluewater Reverse Osmosis System, (CLEONE®, SPIRIT or PRO series), that you have purchased is of excellent quality and construction. However, we will correct, free of charge, any defects in material (excluding replaceable filters, pumps and membranes), or workmanship for a period of 24 month from the original, subject to these terms and conditions. In addition, Bluewater undertakes a 12 months' warranty for the reverse osmosis membrane and pump. No warranty is given for filter cartridges once they have been used (wetted).

2. Services included

In addition to the correction of defects in material or workmanship during the Limited warranty period and subject to exclusions, Bluewater agrees to bear the cost of repair including parts and labor. Any parts replaced during repair become the property of Bluewater. If, in the opinion of Bluewater, a water purifier is beyond economic repair, Bluewater reserves the right at its sole discretion to provide customers with a new product of equivalent specification. If Bluewater replaces the product, the Warranty will become invalid.

3. Exclusions

Bluewater will not bear costs for repairs where appliance breakdown is due to the following:

- Non-compliance with safety regulations and warnings given in the operating instructions.
- Faults caused by the user through operating errors or lack of care and maintenance.
- Non-domestic or commercial use.
- Use that extends beyond 1 000 000 litres of water for PRO, 150 000 litres of water for Spirit and 20 000 litres of water for CLEONE, based on Bluewater's standard water production calculations.
- Intentional damage by the owner or third parties.
- Incorrect installation, including but not limited to not meeting feed water requirements.
- Faulty repairs or repairs carried out by parties other than Bluewater or an Authorized technician;
- External influences (e.g. fire, flooding, freezing, pressure spikes, weather, transit damage)
- Replacement parts subject to wear and tear e.g. filters.
- Visual blemishes such as marks and dents.
- Use of non-approved accessories, filters, membranes or spare parts.
- Damage to accessories.
- Accidental damage.

4. Claims Procedure

1. Contact your authorized Bluewater dealer where you purchased the product.
2. The dealer will request the proof of purchase (invoice, checkout receipt or similar including, date, vendor, price and conditions) and the completion of an Incident report.
3. The dealer will after reviewing 2) issue a Claims Authorization Number (CAN), if the Warranty conditions are met. No claims will be accepted without a CAN.
4. Depending on situation, the product will either be serviced on location by an Authorized Service Technician or brought/sent to an Authorized Service Station for repairs.

Bluewater will only bear repair costs carried out by Bluewater's network of Authorized Service Providers.

If, during a service visit, no fault can be found for which Bluewater is responsible according to this policy, customers will be invoiced with call-out charges, and labor costs of 60 minutes in accordance with Bluewater standard rates for the time being.

5. Liability

Bluewater assumes no warranty liability in connection with Bluewater water purifier systems other than specified herein. This warranty is in lieu of all other warranties, expressed or implied, including warranties of fitness for a particular purpose. Bluewater does not authorize any person or representative to assume for us any other obligations on the sale of a Bluewater water purifier system.

Bluewater shall not be liable for loss of goods, loss of use, or any special, indirect, or pure economic loss, costs, damages, charges or expenses except for liability that Bluewater are not allowed to exclude by law.

This Limited Warranty gives you specific legal rights, and you may also have other rights, which vary from country to country, state to state or province to province. The laws of some jurisdictions do not permit the exclusion or limitation of certain rights or remedies provided by such laws. As this Limited Warranty is subject to such laws, some of the limitations or restrictions contained in this Limited Warranty may not apply to you. The provisions of this Limited Warranty are in addition to and not a modification of or subtraction from the statutory warranties contained in country, state or provincial laws. Some states or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

ARSENIC FACTS SECTION

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(III), 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. 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 Pro 400 HR system is designed to remove pentavalent arsenic. It will not convert 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 Pro 400 HR system must be replaced 3-5 years to ensure that the system will continue to remove pentavalent arsenic. The component identification and locations where you can purchase the component are listed in the installation/operation manual.

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