

Model GQC4-75RO

Substance	Influent Challenge Concentration	Maximum Permissible Product Water Concentration	Reduction Requirements	Average Reduction
Standard 58				
Arsenic V	0.050 mg/L ± 10%	0.010 mg/L		97.6
Barium	10.0 mg/L ± 10%	2.0 mg/L		96.7
Cadmium	0.03 mg/L ± 10%	0.005 mg/L		98.2%
Chromium III	0.3 mg/L ± 10%	0.1 mg/L		97.6
Chromium VI	0.3 mg/L ± 10%	0.1 mg/L		97.0
Copper	3.0 mg/L ± 10%	1.3 mg/L		98.8%
Cysts	Minimum 50,000/ mL		99.95%	99.99%
Fluoride	8.0 mg/L ± 10%	1.5 mg/L		96.2%
Lead	0.15 mg/L ± 10%	0.010 mg/L		99.0%
Nitrate	27.0 mg/L ± 10%	10.0 mg/L		87.1%
Nitrite	3.0 mg/L ± 10%	1.0 mg/L		89.3%
Radium 226/228	27pCi/L ± 10%	5pCi/L		80%
Selenium	0.10 mg/L ± 10%	0.05 mg/L		98.0%
Total Dissolved Solids	750 mg/L ± 40 mg/L	187 mg/L		94.9%
Turbidity	11 mg/L ± 1 NTU	0.5 NTU		99.1%
Standard 42				
Chlorine	2 mg/L		>=50%	93.0%

Production Rate: 24.83 gpd



The GQC4-75RO is Tested and Certified by NSF International against NSF/ANSI Standard 42 and 58 for the reduction of substances listed in the table above.

Testing was performed under standard laboratory conditions, actual performance may vary.

State of California Department of Public Health
Water Treatment Device
Certificate Number
13-2136

Date Issued: January 17, 2013 Revised March 18, 2013

Trademark/Model Designation
 GQC4-75RO

Replacement Elements
 GQC4-1RSLD Sediment Prefilter
 GQC4-2RCBN Carbon Prefilter
 GQC4-3RRE75 Membrane
 GQC4-4RGCAC Carbon Postfilter

Manufacturer: Private Residential Filtration

The water treatment device(s) listed on this certificate have met the testing requirements pursuant to Section 116830 of the Health and Safety Code for the following health related contaminants:

Microbiological Contaminants and Turbidity:
 Cysts (Protozoa)
 Turbidity

Inorganic Radionuclide Contaminants:
 Arsenic (5ppb)
 Barium
 Cadmium
 Chromium (hexavalent)
 Chromium (trivalent)
 Radium 226/228

Organic Contaminants:
 None

Heavy Metal Contaminants:
 Copper
 Fluoride
 Lead
 Selenium
 Nitrate-Nitrite

Rated Service Capacity: n/a

Rated Service Flow: 24.83 gal/day

Conditions of Certification

Do not use where water is microbiologically unsafe or with water of unknown quality, except that systems for cyst reduction may be used on disinfected waters that contain filterable cysts.

¹ Claims for arsenic reduction shall only be made on water supplies maintaining detectable free chlorine at the reverse osmosis (RO) system inlet. System has been tested for reduction of arsenic at concentrations of 0.050 mg/L or less. Water systems using an in-line chlorinator should provide a minimum of 1 minute chlorine contact time before the RO system.

² This system is acceptable for treatment of influent concentrations of no more than 27 mg/l nitrate and 3 mg/l nitrite in combination measured as N and is certified for nitrate/nitrite reduction only for water supplies with a pressure of 280 kPa (40psig) or greater. A sampling and analysis test kit for nitrites is provided for checking the performance of this system. Frequent analysis is encouraged.

Arsenic Fact Sheet

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 lab 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 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 US Environmental Protection Agency web site: 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 GQC4-75RO system is designed to remove pentavalent arsenic. It will not convert trivalent arsenic to pentavalent arsenic. The system was tested in a lab. Under those conditions, the system reduced 0.50 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 if the system is working properly.

The RO component of the GQC4-75RO system must be replaced every 12-24 months to ensure the system will continue to remove pentavalent arsenic.

Performance Data

Important Notice: Read this performance data and compare the capabilities of this system with your actual water treatment needs. It is recommended that before installing a water treatment system, you have your water supply tested to determine your actual water treatment needs.

This system has been tested according to NSF/ANSI 58 for the reduction of the substances listed below. The concentration for 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.

Note: Substances that may be reduced are not necessarily in your water. Filter must be maintained according to manufacturer's instructions, including replacement of filter cartridges.

The tested efficiency rating for this system is 15.80%. 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. The tested recovery rating is 27.40%. 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.