Kinetico **PREMIER**™

SERIES

PERFORMANCE DATA SHEET Water Conditioning Systems



Model/Product Numbers

S150 (15075) S250 (15080) S250 OD (15070) S350 (15087) S550 (15097) S650 (15057) S650 OD (15050) Q850 (15125) Q850 OD (15119)





SERIES

Models S150, S250, S250 OD, S350, S550, S650, S650 OD, Q850, Q850 OD

Water Conditioning Systems
Performance Data Sheet

The Kinetico Premier™ Series water conditioning systems are tested and certified by the Water Quality Association (WQA) against NSF/ANSI Standard 44 for softener performance and reduction of barium and radium. In addition, the materials and components used in the construction of these systems have been tested to assure that levels of extractable contaminants do not exceed established limits set by NSF/ANSI Standard 44. They have also been evaluated under Standard 44 to assure that they are designed and constructed so their intended purpose can be accomplished when installed and operated in accordance with the manufacturer's instructions.

IMPORTANT

- Installation of this product must comply with state and local plumbing laws.
- Provisions for an antisiphon air gap should be part of the installation to prevent a cross connection between the water system and the waste system.
- Waste connections or drain outlets shall be designed and constructed to provide for connection to the sanitary water system through an air gap of 2 pipe diameters or 1 inch (25mm) whichever is larger.
- Do not use on water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system, or that contains high concentrations of sediment, dirt or other suspended matter without additional treatment steps.
- Read this performance data sheet and compare the capabilities of this unit with your actual water treatment needs.
- It is recommended that before purchasing a water treatment unit, you have your water supply tested to determine your actual water treatment needs.
- The reduction of barium and radium 226/228 is directly related to the softening performance of your system. Have your system tested for hardness reduction every few months to assure the system is softening properly. Please note that barium and radium are not necessarily in your water supply.
- For operation and maintenance information, consult the product owner's manual. Installation instructions are available for review from your authorized Kinetico Dealer.
- Kinetico recommends the use of a quality grade pure salt (sodium chloride) processed especially for water conditioners.
- Water conditioners using sodium chloride for regeneration add sodium to the water. Persons who are on sodium restricted diets should consider the added sodium as part of their overall sodium intake.
- An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerant brine and water used in its operation. These softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchanged per pound (477 grams per kilogram) of salt (based on NaCl equivalency) and shall not deliver more salt than its listed rating. The efficiency is valid only at the low salt dosage and is measured by a laboratory test described in NSF/ANSI Standard 44. The test represents the maximum possible efficiency that the system can achieve. Operational efficiency is the actual efficiency achieved after the system has been installed. It is typically less than the efficiency due to individual application factors including water hardness, water usage, and other contaminants that reduce the softener's capacity.

WARRANTY COVERAGE

Kinetico Incorporated warrants this product to be free from defects in material and workmanship for a period of ten years from the date of installation (freight and labor charges not included). For a period of ten years from installation date, faulty resin/media tanks and salt storage tank will be replaced at no charge. A formal copy of the Warranty for Residential Applications is presented at the time of purchase. Please contact your local authorized Kinetico Dealer with any questions about the warranty, parts or service.

CONTAMINANT REDUCTION CAPABILITIES

IMPORTANT NOTICE! Read this performance data sheet and compare the capabilities of this unit with your actual water treatment needs. It is recommended that before purchasing a water treatment unit, you have your water supply tested to determine your actual water treatment needs. Please note that barium and radium are not necessarily in your water and that while testing was performed under standard laboratory conditions, actual performance may vary. The system has been tested according to NSF/ANSI Standard 44 for reduction of barium and radium 226/228. 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 Standard 44. The charts on the following pages list the specifications and reduction capabilities by model and contain the following information based on WQA test results:

- The percent of reduction that can be expected
- Conditions under which the units were tested (pressure, pH and temperature)
- Influent and effluent levels of contaminated tested water
- The USEPA's maximum contaminant level (MCL)



SPECIFICATIONS:

Minimum/Maximum Operating Pressure: 103.4-861.9 kPa (15-125 psi) 172.3-861.9 kPa (25-125 psi)

Maximum Working Pressure: 861.9 kPa (125 psi)

Minimum/Maximum Operating Temperature: 2°C-49°C (35°F-120°F)

MODEL	S150		S250		S250 OD	
Service flow rate at 15 psi (or less) drop gpm	9 (34.1 L/min)		11.6 (43.9 L/min)		20.5 (77.6 L/min)	
Resin per tank, cu. ft.	0.47		0.7		0.7	
Capacity per cycle, grains	7491	9600	11,792	14,196	11,792	14,196
Grains exchanged per pound of salt	4161*	3556	4368*	3549	4368*	3549
Salt used per cycle, lbs.	1.8 [†]	2.7	2.7	4.0	2.7	4.0
Max flow rate to drain during regeneration, gpm	1.7 (6.4 L/min)		2.2 (8.3 L/min)		2.2 (8.3 L/min)	

MODEL	S350		S550		\$650	
Service flow rate at 15 psi (or less) drop gpm	11.2 (45.4 L/min)		16.4 (62.1 L/min)		7 (26.5 L/min)	
Resin per tank, cu. ft.	1.5		2.25		0.4	
Capacity per cycle, grains	24,626	38,308	58,548	74,032	5377	
Grains exchanged per pound of salt	4477*	3830	3903	2468	5377*	
Salt used per cycle, lbs.	5.5	10.0	15.0	30.0	1.0	
Max flow rate to drain during regeneration, gpm	3.5 (13.2 L/min)) 5.2 (19.6 L/min)		1.6 (6.0 L/min)	

MODEL	S650 OD	Q850		Q850 OD	
Service flow rate at 15 psi (or less) drop gpm	11 (41.6 L/min)	6 (22.7 L/min)		11 (41.6 L/min)	
Resin per tank, cu. ft.	0.4	upper 0.4 resin	lower 0.4 carb	upper 0.4 resin	lower 0.4 carb
Capacity per cycle, grains	5377	4766		953	3**
Grains exchanged per pound of salt	5377*	4766*		476	6*
Salt used per cycle, lbs.	1.0	1.0		1.0)
Max flow rate to drain during regeneration, gpm	1.6 (6.0 L/min)	3.6 (13.6 L/min)		3.6 (13.6 L/min)	

^{*} Meets California requirements of 4000 grains exchanged per pound of salt used. Efficiency is only certified at the low salt dosage and service flow rate and was determined in accordance with NSF/ANSI Std. 44.

^{**} Two (2) Tanks



Kinetico Premier Series Water Conditioning Systems are tested and certified by WQA against the requirements of NSF/ANSI Standard 44 for softener performance and chemical reduction of barium and radium 226/228. They are also certified to NSF/ANSI 372, Drinking Water System - Lead Content and the CSA Standard B483.1 - Drinking Water Treatment Systems.



Contaminant Reduction Capability

Read this performance data sheet and compare the capabilities of this unit with your actual water treatment needs. Please note that barium and radium are not necessarily in your water. It is recommended that, before purchasing a water treatment unit, you have your water supply tested to determine your actual water treatment needs. These charts contain information based on test results for the reduction of barium and radium 226/228. Hardness is used in the test water to verify this reduction.

S150	Barium	Radium
Test Pressure	35 psi <u>+</u> 5 psi	35 psi <u>+</u> 5 psi
Test Flow Rate	4.5 gpm	4.5 gpm
рН	7.5 <u>+</u> .5	7.5 <u>+</u> .5
Influent Level	<10mg/L ± 10%	<25 pCi/L ± 10%
Effluent Level	<2.0	<5pCi/L
Percent Reduction	<u>></u> 80	<u>></u> 80
EPA Max. Allowable Product Water Level	2.0mg/L	5 pCi/L

S550	Barium	Radium
Test Pressure	35 psi <u>+</u> 5 psi	35 psi <u>+</u> 5 psi
Test Flow Rate	8.6 gpm	8.6 gpm
рН	7.5 <u>+</u> .5	7.5 <u>+</u> .5
Influent Level	<10mg/L ± 10%	<25 pCi/L ± 10%
Effluent Level	<2.0	<5pCi/L
Percent Reduction	<u>></u> 80	<u>></u> 80
EPA Max. Allowable Product Water Level	2.0mg/L	5 pCi/L

S250 / S250 OD	Barium	Radium
Test Pressure	35 psi <u>+</u> 5 psi	35 psi <u>+</u> 5 psi
Test Flow Rate	5.8 gpm/10 gpm	5.8 gpm/10 gpm
рН	7.5 <u>+</u> .5	7.5 <u>+</u> .5
Influent Level	<10mg/L ± 10%	<25 pCi/L ± 10%
Effluent Level	<2.0	<5pCi/L
Percent Reduction	<u>></u> 80	<u>></u> 80
EPA Max. Allowable Product Water Level	2.0mg/L	5 pCi/L

S650 / S650 OD	Barium	Radium	
Test Pressure	35 psi <u>+</u> 5 psi	35 psi <u>+</u> 5 psi	
Test Flow Rate	3.5 gpm/5.5 gpm	3.5 gpm/5.5 gpm	
рН	7.5 <u>+</u> .5	7.5 <u>+</u> .5	
Influent Level	<10mg/L ± 10%	<25 pCi/L ± 10%	
Effluent Level	<2.0	<5pCi/L	
Percent Reduction	<u>></u> 80	<u>></u> 80	
EPA Max. Allowable Product Water Level	2.0mg/L	5 pCi/L	

S350	Barium	Radium
Test Pressure	35 psi <u>+</u> 5 psi	35 psi <u>+</u> 5 psi
Test Flow Rate	6 gpm	6 gpm
рН	7.5 <u>+</u> .5	7.5 <u>+</u> .5
Influent Level	<10mg/L ± 10%	<25 pCi/L ± 10%
Effluent Level	<2.0	<5pCi/L
Percent Reduction	<u>></u> 80	<u>></u> 80
EPA Max. Allowable Product Water Level	2.0mg/L	5 pCi/L

Q850 / Q850 OD	Barium	Radium
Test Pressure	35 psi <u>+</u> 5 psi	35 psi <u>+</u> 5 psi
Test Flow Rate	2.8 gpm/5.5 gpm	2.8 gpm/5.5 gpm
рН	7.5 <u>+</u> .5	7.5 <u>+</u> .5
Influent Level	<10mg/L ± 10%	<25 pCi/L ± 10%
Effluent Level	<2.0	<5pCi/L
Percent Reduction	<u>></u> 80	<u>></u> 80
EPA Max. Allowable Product Water Level	2.0mg/L	5 pCi/L