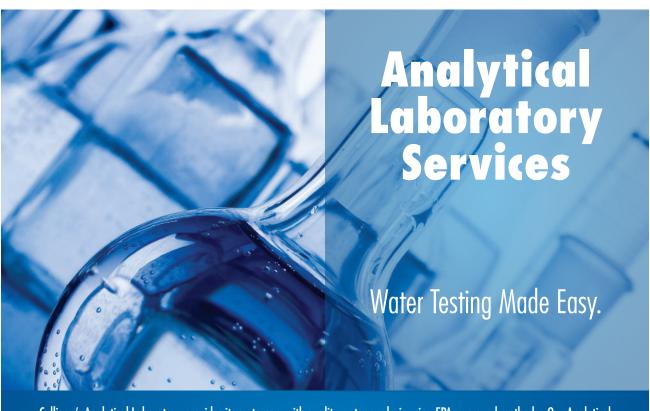


# High Efficiency Water Conditioners

Models from 2021





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### **About This Manual**

### This manual:

- · Familiarizes the operator with the equipment
- Explains installation and setup procedures
- Provides basic programming information
- Explains the various modes of operation
- Gives specifications and troubleshooting information

### Read this Manual First

Before you operate the Culligan unit, read this manual to become familiar with the device and its capabilities.

Installation or maintenance done on this system by an untrained service person can cause major damage to equipment or property damage. Not adhering to the recommended service/maintenance can cause damage to equipment or property damage.

### Safety Instructions and Safety Definitions

### **Note**

NOTE! "Note!" is used to emphasize installation, operation or maintenance information which is important, but does not present any hazard.

### Caution



"Caution" is used when failure to follow directions could result in damage to equipment or property.

### Warning



#### WARNING!

"Warning" is used to indicate a hazard which could cause injury or death if ignored.

The **CAUTION** and **WARNING** paragraphs are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution, and careful attention are conditions which cannot be built into the equipment. These MUST be supplied by the personnel installing, operating, or maintaining the system.

NOTE! Be sure to check and follow the applicable plumbing codes and ordinances when installing this equipment. WARNING! Use protective clothing and proper face or eye protection equipment when handling chemicals or power tools.



### **Attention Culligan Customer:**

We encourage Culligan users to learn about Culligan products, but we believe that product knowledge is best obtained by consulting with your Culligan dealer. Untrained individuals who use this manual assume the risk of any resulting property damage or personal injury.



#### **WARNING!**

Electrical shock hazard! Prior to servicing equipment, disconnect power supply to prevent electrical shock.

#### **WARNING!**

If incorrectly installed, operated, or maintained, this product can cause severe injury. Those who install, operate, or maintain this product should be trained in its proper use, warned of its dangers, and should read the entire manual before attempting to install, operate, or maintain this product. Failure to comply with any warning or caution that results in any damage will void the warranty.



This system is to be supplied with cold water only.

This product is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction. Children should be instructed not to play with this appliance.

#### **CAUTION!**

If the power cord from the power supply to the unit looks or becomes damaged, the cord and power supply should be replaced by a Culligan Service Agent or similarly qualified person in order to avoid a hazard.

#### **CAUTION!**

To reduce the risk of fire, use only No. 26 AWG or larger telecommunications line cord.

NOTE! This system is not intended for use with water that is microbiologically unsafe or of unknown quality without adequate disinfection either before or after the system.

Check with your public works department for applicable local plumbing and sanitation codes. Follow local codes if they differ from the standards used in this manual. To ensure proper and efficient operation of this Culligan product to your full satisfaction, carefully follow the instructions in this manual.

Products manufactured and marketed by Culligan International Company (Culligan) and its affiliates are protected by patents issued or pending in the United States and other countries. Culligan reserves the right to change the specifications referred to in this literature at any time without prior notice. Culligan, Aqua-Sensor, Tripl-Hull, and SoftMinder are trademarks of Culligan International Company or its affiliates.

### **Culligan International Company**

9399 West Higgins Road, Suite 1100 Rosemont, Illinois 60018 1-847-430-2800 www.culligan.com



### **Thank You!**

### Welcome To Your New World of Better Living with Culligan Water.

Congratulations on selecting the Culligan® High Efficiency Water Conditioner system. With Culligan's many years of knowledge and experience in water treatment, you can be confident that the model you selected has been designed and engineered to provide years of service with a minimum of care and attention.

If this is your first experience having filtered, conditioned water in your home, you'll love the amazing difference it makes. We promise that you'll never want to be without it again.

The Culligan High Efficiency Water Conditioner system is designed to meet the needs of applications for high quality water. This manual contains important information about the unit, including information needed for installation, operating, and maintenance procedures. A troubleshooting section provides a guide for quick and accurate problem solving.

This manual is based on information available at the time it was finalized, approved, and published. Continuing design refinement could cause changes that may not be included in this publication.

Your local independently operated Culligan dealer employs trained service and maintenance personnel who are experienced in the installation, function and repair of Culligan equipment. This publication is written specifically for these individuals and is intended for their use.

The Culligan High Efficiency and High Efficiency Upflow are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data.



The Culligan High Efficiency Municipal Water Softeners are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI Standard 42 for the effective reduction of Chlorine Taste and Odor, as verified and substantiated by test data.

The Culligan High Efficiency Softener-Cleer and Softener-Cleer Plus Softeners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective Iron Reduction up to 10ppm, as verified and substantiated by test data.

The Culligan High Efficiency Twin, High Efficiency Twin Upflow, and High Efficiency Twin Outdoor water softeners with Soft-Minder® Meter and Aqua-Sensor® sensing device are tested and certified by the WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium and radium 226/228, as verified and substantiated by test data.

The Culligan High Efficiency 1.25 water conditioners with Soft-Minder® meter and Aqua-Sensor® sensing device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data.

The Culligan High Efficiency HE 1.25, The Culligan High Efficiency Twin, High Efficiency Twin Upflow, and High Efficiency Twin Outdoor, water softener outdoor controller enclosure complies with the UL 50/50E standards for an IP 46 Rating.

The Culligan High Efficiency Water Softener Outdoor Controller Enclosure complies with the UL 50/50 standards for an IP X6 Rating

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Licensed plumbers know that standard industry procedures include only to hand tighten or use strap wrenches on plastic parts. Plastic piping systems must be installed, operated and maintained in accordance with accepted standards and procedures. Not adhering to the recommended service/maintenance can cause damage to equipment or property damage.



### **Specifications**

### **Culligan High Efficiency (HE) Water Conditioners** Culligan High Efficiency Softener—Downflow Regeneration

	9" Model	10" Model	12" Model	14" Model
Control Valve	1" Reinforced Thermoplastic w/ High Efficiency Circuit Boards			t Boards
Overall Conditioner Ht	56 in	62 in	60 in	73 in
Media Tank Design		Quadra	a-Hull™	
Media Tank Dimensions (Dia x Ht)	9 x 48 in	10 x 54 in	12 x 52 in	14 x 65 in
Salt Storage Tank Dimensions (Dia x Ht)	16 x 43 in or 18 x 43 in	16 x 43 in or 18 x 43 in	18 x 43 in	24 x 42 in
Exchange Media, Type and Quantity	Cullex® Media,1.0 ft <sup>3</sup>	Cullex Media, 1.5 ft <sup>3</sup>	Cullex Media, 2.0 ft <sup>3</sup>	Cullex Media, 3.0 ft <sup>3</sup>
Underbedding, Type and Quantity	Cullsan® Underbedding, 12 lb	Cullsan Underbedding, 15 lb	Cullsan Underbedding, 20 lb	Cullsan Underbedding, 25 lb
F 1 0 11 0	17,854 gr @ 4.0 lb	26,781 gr @ 6.0 lb	31,352 gr @ 7.0 lb	42,548 gr @10.5 lb
Exchange Capacity @ Salt Dosage Per Recharge	27,108 gr @ 8.0 lb	40,662 gr @ 12.0 lb	48,458 gr @ 16.0 lb	67,146 gr @ 24 lb
Call Bookings 1 of Moonlarge	31,736 gr @ 12.0 lb	47,604 gr @ 18.0 lb	59,267 gr @ 18.0 lb	87,987 gr @ 36 lb
Efficiency rated dosage <sup>1</sup>	4,463 gr/lb @ 4 lb salt dosage	4,463 gr/lb @ 6 lb salt dosage	4,479 gr/lb @ 7 lb salt dosage	4,052 gr/lb @ 10.5 lb salt dosage
Freeboard to Media <sup>2</sup>	14.5 in	14.5 in	16 in	25 in
Freeboard to Underbedding <sup>3</sup>	44.5 in	47.5 in	46 in	59 in
Salt Storage Capacity	250 lb or 375 lb	250 lb or 375 lb	375 lb	600 lb
Rated Service Flow @ Pressure Drop	9.0 gpm @ 12 psi	9.4 gpm @ 12 psi	10.0 gpm @ 11 psi	10.6 gpm @ 11 psi
Auxiliary Flow Rate <sup>4</sup>	10.8 gpm @ 15 psi	11.0 gpm @ 15 psi	12.6 gpm @ 15 psi	12.8 gpm @ 15 psi
Total Hardness, Maximum	75 gpg	99 gpg	99 gpg	99 gpg
Total Iron, Maximum		5 բ	ppm	
Hardness to Iron Ratio, Minimum		8 gpg t	o 1 ppm	
Operating Pressure		20-125 psi (1	138–862 kPa)	
Operating Pressure (Canada)	20-90 psi (138–621 kPa)			
Operating Temperature	33-120°F (0-49°C)			
Electrical Requirements		28 VD	C/60 Hz	
Electrical Power Consumption, Min/Max	8.4 Watts/21.6 Watts			
Drain Flow, Maximum <sup>5</sup>	2.5 gpm	2.5 gpm	4.0 gpm	5.3 gpm
Recharge Time, Average <sup>6</sup> Recharge Water	78 minutes	67 minutes	62 minutes	76 minutes
Consumption, Average <sup>6</sup>	47 gallons	60 gallons	124 gallons	167 gallons
			•	•

<sup>&</sup>lt;sup>1</sup> The efficiency rated dosage is only valid at the stated salt dosage and is efficiency rated according to NSF/ANSI 44. <sup>2</sup> Measured from top of media to top surface of tank threads. (Backwashed and drained).

<sup>610</sup> minute backwash, 4 lb 9" model, 6 lb. 10" model, 7 lb. 12" model or 12 lb. 14" model salt dosage.



<sup>&</sup>lt;sup>3</sup> Measured from top of underbedding to top surface of tank threads.

Measured from top of underbedding to top surface of tank inreads.
 Auxiliary flow rates do not represent the maximum service flow rate used for determining the softener's rated capacity and efficiency. Continuous operation at these flow rates greater than the maximum service flow rate might affect capacity and efficiency performances.
 Backwash at 120 psi (830 kPa).

### Culligan High Efficiency™ Softener—Upflow & Upflow Outdoor Regeneration

	9" Model	10" Model
Control Valve	1" Reinforced Thermoplastic with High Efficiency Circuit Board	
Overall Conditioner Height	56 in	62 in
Media Tank Design	Quadra	ı-Hull™
Media Tank Dimensions (Dia x Ht)	9 x 48 in	10 x 54 in
Salt Storage Tank Dimensions (Dia x Ht)	16" x 43" o	r 18" x 43"
Exchange Media, Type and Quantity	Cullex® Media, 1.0 ft <sup>3</sup>	Cullex Media, 1.5 ft <sup>3</sup>
Underbedding, Type and Quantity	Cullsan® Underbedding, 12 lb	Cullsan Underbedding, 15 lb
Exchange Capacity @ Salt Dosage Per Recharge	9,792 gr @ 2.0 lb	15,314 gr @ 3.0 lb
	17,366 gr @ 4.0 lb	24,999 gr @ 6.0 lb
	27,306 gr @ 8.0 lb	37,674 gr @ 12.0 lb
Efficiency Rated Dosage <sup>1</sup>	4,896 gr/lb @ 2 lb salt dosage	5,105 gr/lb @ 3 lb salt dosage
Proportional Brining Efficiency Rating <sup>2</sup>	5,760 gr/lb @ 2 lb salt dosage	5,898 gr/lb @ 6 lb salt dosage
Freeboard to Media <sup>3</sup>	14.5 in	14.5 in
Freeboard to Underbedding <sup>4</sup>	44.5 in	47.5 in
Salt Storage Capacity	250 lb o	r 375 lb
Rated Service Flow @ Pressure Drop	9.0 gpm @ 11 psi	9.4 gpm @ 12 psi
Auxiliary Flow Rate <sup>5</sup>	10.8 gpm @ 15 psi	11.0 gpm @ 15 psi
Total Hardness, Maximum	30	gpg
Total Iron, Maximum	2 p	pm
Hardness to Iron Ratio, Minimum	8 gpg to	1 ppm
Operating Pressure	20-125 psi (1	38–862 kPa)
Operating Pressure (Canada)	20-90 psi (13	38–621 kPa)
Operating Temperature	33-120°F	(0-49°C)
Electrical Requirements	28 VDC	C/60 Hz
Electrical Power Consumption, Min/Max	8.4 watts/21.6 watts	
Drain Flow, Maximum <sup>6</sup>	2.2 gpm	2.3 gpm
Recharge Time, Average <sup>7</sup> Recharge Water	68 minutes	57 minutes
Consumption, Average <sup>7</sup> (Evaluated by WQA)	33 gallons	35 gallons
Consumption, Average <sup>8</sup> (Not evaluated by WQA)	25.5 gallons	27.5 gallons

<sup>&</sup>lt;sup>1</sup> The efficiency rated dosage is only valid at the stated salt dosage and 5-minute backwash. It is efficiency rated according to NSF/ANSI 44.



<sup>&</sup>lt;sup>2</sup> The Proportional Brining Efficiency Rating assumes a 20 percent reserve capacity at the time of regeneration that is typical of what the manufacturer expects under real-world operation. Proportional brining is not measured by NSF/ANSI44, and so this claim is not, and can not, be rated to NSF/ANSI44.

<sup>&</sup>lt;sup>3</sup> Measured from top of media to top surface of tank threads. (Backwashed and drained).

<sup>&</sup>lt;sup>4</sup> Measured from top of underbedding to top surface of tank threads.

<sup>&</sup>lt;sup>5</sup> Auxiliary flow rates do not represent the maximum service flow rate used for determining the softener's rated capacity and efficiency. Continuous operation at these flow rates greater than the maximum service flow rate might affect capacity and efficiency performances...

<sup>&</sup>lt;sup>6</sup> Backwash at 120 psi (830 kPa).

 <sup>5-</sup>minute backwash, 2lb 9" model, 6lb 10" model. These values have been tested and certified by WQA and IAPMO R&T.
 2-minute backwash, 2lb 9" model, 6lb 10" model. These values are based on the manufacturer recommended backwash time.

### Culligan High Efficiency™ Softener—Municipal & Municipal Outdoor

	9" Model	10" Model	12" Model	14" Model
Control Valve	1" Reinforced Thermoplastic w/ High Efficiency Circuit Boards			uit Boards
Overall Conditioner Height	54 in	60 in	58 in	71 in
Media Tank Design		Quadra	a-Hull™	
Media Tank Dimensions (Dia x Ht)	9 x 48 in	10 x 54 in	12 x 52 in	14 x 65 in
Salt Storage Tank Dimensions (Dia x Ht)	16 x 43 in or 18 x 43 in	16 x 43 in or 18 x 43 in	18 x 43 in	24 x 42 in
Exchange Media, Type and Quantity	Cullex® Media, 0.8 ft <sup>3</sup>	Cullex® Media, 1.0 ft <sup>3</sup>	Cullex® Media, 1.5 ft <sup>3</sup>	Cullex® Media, 2.3 ft <sup>3</sup>
Carbon Media, Quantity	6 lbs	8 lbs	12 lbs	18 lbs
Underbedding, Type and Quantity	Cullsan <sup>®</sup> Underbedding, 12 lb	Cullsan <sup>®</sup> Underbedding, 15 lb	Cullsan <sup>®</sup> Underbedding, 20 lb	Cullsan <sup>®</sup> Underbedding, 25 lb
Exchange Capacity @ Salt Dosage Per Recharge	17,119 gr @ 4.0 lb 25,232 gr @ 8.0 lb 27,806 gr @ 12.0 lb	21,399 gr @ 5.0 lb 28,534 gr @ 10.0 lb 34,758 gr @ 15.0 lb	29,062 gr @ 7.0 lb 43,990 gr @ 18.0 lb 49,343 gr @ 30.0 lb	42,943 gr @ 10.7 lb 54,497 gr @ 18.0 lb 66,230 gr @ 28.0 lb
Efficiency rated dosage <sup>1</sup>	4,280 gr/lb @ 4 lb salt dosage	4,280 gr/lb @ 5 lb salt dosage	4,152 gr/lb @ 7 lb salt dosage	4,013 gr/lb @ 10.7 lb salt dosage
Chlorine Taste and Odor Capacity	300,000 gallons	339,000 gallons	621,000 gallons	935,000 gallons
Freeboard to Media <sup>2</sup>	15.75 in	19.5 in	17.31 in	25.89 in
Freeboard to Underbedding <sup>3</sup>	44.5 in	47.5 in	46 in	59 in
Salt Storage Capacity	250 lb (	or 375 lb	375 lb	650 lb
Rated Service Flow @ Pressure Drop	9.0 gpm @ 11.0 psi	9.4 gpm @11.0 psi	10.0 gpm @11.0 psi	10.6 gpm @11.0 psi
Total Hardness, Maximum		15	gpg	
Total Iron, Maximum		0 p	ppm	
Color		Less <sup>-</sup>	Than 1	
Turbidity		Less Tha	an 5 NTU	
TOC		Less Tha	n 0.5 PPM	
Operating Pressure		20-125 psi (1	138–862 kPa)	
Operating Pressure (Canada)	20-90 psi (138–621 kPa)			
Operating Temperature		33-120°F	(0-49°C)	
Electrical Requirements		28 VD0	C/60 Hz	
Electrical Power Consumption, Min/Max	8.4 Watts/21.6 Watts			
Drain Flow, Maximum <sup>4</sup>	2.6 gpm	2.6 gpm	3.7 gpm	6.2 gpm
Recharge Time, Average <sup>5</sup> Recharge Water	78 min	67 min	62 min	76 min
Consumption, Average <sup>5</sup>	70 gal	70 gal	109 gal	170 gal
1				

<sup>&</sup>lt;sup>1</sup> The efficiency rated dosage is only valid at the stated salt dosage and is efficiency rated according to NSF/ANSI 44. <sup>2</sup> Measured from top of media to top surface of tank threads. (Backwashed and drained).



<sup>&</sup>lt;sup>3</sup> Measured from top of underbedding to top surface of tank threads.

<sup>&</sup>lt;sup>4</sup> Backwash at 120 psi (830 kPa).

<sup>&</sup>lt;sup>5</sup> 10 minute backwash, 4 lb. 9" model, 5 lb. 10" model, 7 lb. 12" model, or 9 lb. 14" model

### **Culligan High Efficiency Softener-Cleer**

Model	9" Model	10" Model	12" Model	14" Model
Control Valve	1" Rei	nforced Thermoplastic	w/ High Efficiency Circu	it Board
Overall Softener Ht	56 in 62 in		60 in	73 in
Media Tank Design		Quadi	a-Hull™	
Media Tank Dimensions (Dia x Ht)	9 x 48 in	10 x 54 in	12 x 52 in	14 x 65 in
Salt Storage Tank Dimensions (Dia x Ht)	16 x 43 in o	r 18 x 43 in	18 x 43 in	24 x 42 in
Exchange Media, Type and Quantity	Cullex® Media,1.0 ft <sup>3</sup>	Cullex Media, 1.5 ft <sup>3</sup>	Cullex Media, 2.0 ft <sup>3</sup>	Cullex Media, 3.0 ft <sup>3</sup>
Underbedding, Type and Quantity	Cullsan® Underbedding, 12 lb	Cullsan Underbedding, 15 lb	Cullsan Underbedding, 20 lb	Cullsan Underbedding, 25 lb
Freshamore Composite	17,854 gr @ 4.0 lb	26,781 gr @ 6.0 lb	31,352 gr @ 7.0 lb	42,548 gr @ 10.5 lb
Exchange Capacity  @ Salt Dosage Per Recharge	27,108 gr @ 8.0 lb	40,662 gr @ 12.0 lb	48,458 gr @ 16.0 lb	67,146 gr @ 24 lb
Ge can Boodge For Hoonarge	31,736 gr @ 12.0 lb	47,604 gr @ 18.0 lb	59,267 gr @ 24.0 lb	87,987 gr @ 36 lb
Efficiency rated dosage <sup>1</sup>	4,463 gr/lb @ 4 lb salt dosage	4,463 gr/lb @ 6 lb salt dosage	4,479 gr/lb @ 7 lb salt dosage	4,052 gr/lb @ 10.5 lb salt dosage
Freeboard to Media <sup>2</sup>	14.5 in	14.5 in	16 in	25 in
Freeboard to Underbedding <sup>3</sup>	44.5 in	47.5 in	46 in	59 in
Salt Storage Capacity		375 lb		600 lb
Rated Service Flow @ Pressure Drop	9.0 gpm @ 12 psi	9.4 gpm @ 13 psi	10.0 gpm @ 11 psi	10.6 gpm @ 11 psi
Auxiliary Flow Rate <sup>4</sup>	10.8 gpm @ 15 psi	11.0 gpm @ 15 psi	12.6 gpm @ 15 psi	12.8 gpm @ 15 psi
Total Hardness, Max.	50 gpg		75 gpg	
Total Dissolved Iron,Max 10 ppm <sup>5</sup>	2000 gal	3000 gal	4000 gal	6000 gal
Flow Rate for Iron Reduction <sup>6</sup>	9.0 gpm	9.4 gpm	10.0 gpm	10.6 gpm
Iron and Sulfur Reducing Bacteria <sup>8</sup>		Trace	Amounts	
рН		6.5	5–8.5	
Tannins		0.0	ppm	
Total Organic Carbon		0.0	ppm	
Free Chlorine Level		0.0	ppm	
Dissolved Oxygen		3.0 ppn	n or below	
Polyphosphate		0.0	ppm	
Operating Pressure		20-125 psi (	138–862 kPa)	
Operating Pressure (Canada)		20-90 psi (	138–621 kPa)	
Operating Temperature		33-120°	F (0-49°C)	
Electrical Requirements	28 VDC/60 Hz			
Electrical Power Consumption, Min/Max	8.4 watts/21.6 watts			
Drain Flow, Maximum <sup>6</sup>	2.38 gpm	2.5 gpm	3.5 gpm	5.3 gpm
Recharge Time, Average <sup>7</sup> Recharge Water	78 minutes	67 minutes	62 minutes	76 minutes
Consumption, Average <sup>7</sup>	58.1 gallons	65.1 gallons	108.2 gallons	167.1 gallons

<sup>&</sup>lt;sup>1</sup> The efficiency rated dosage is only valid at the stated salt dosage and is efficiency rated according to NSF/ANSI 44. Water consumption determined in accordance with 7.1.1 of NSF/ANSI 44.

<sup>2</sup> Measured from top of media to top surface of tank threads. (backwashed and drained)



Measured from top of media to top surface of tank threads. (backwashed and drained).

Measured from top of infedia to top surface of tank threads. (Pasads. 4 Auxiliary flow rates do not represent the maximum service flow rate used for determining the softener's rated capacity and efficiency. Continuous operation at these flow rates greater than the maximum service flow rate might affect capacity and efficiency performances.

<sup>5</sup> Performance testing on these models was performed at the flow rates specified. When a higher flow rate occurs upon installation, a flow control, restrictor, or other method of flow reduction should be used in order to mimic these performance results.

<sup>6</sup> Backwash at 120 psi (830 kPa).

<sup>&</sup>lt;sup>7</sup>10 minute backwash, 4 lb 9" model, 6 lb. 10" model, 7 lb. 12" model or 12 lb. 14" model salt dosage.

<sup>&</sup>lt;sup>8</sup> The Iron and Sulfur reducing bacteria performance is a manufacturer claim and has not been evaluated or certified by WQA.

### **Culligan High Efficiency Softener-Cleer Plus**

Model	9" Model	10" Model	12" Model	14" Model
Control Valve	1" Reinforced Thermoplastic w/ HE Circuit Board			
Overall Softener Ht	56 in	62 in	60 in	73 in
Media Tank Design		Quadra	ı-Hull™	
Media Tank Dimensions (Dia x Ht)	9 x 48 in	10 x 54 in	12 x 52 in	14 x 65 in
Salt Storage Tank Dimensions (Dia x Ht)	16 x 43 in o	r 18 x 43 in	18 x 43 in	24 x 42 in
Exchange Media, Type and Quantity	Cullex® Media,1.0 ft <sup>3</sup>	Cullex Media, 1.5 ft <sup>3</sup>	Cullex Media, 2.0 ft <sup>3</sup>	Cullex Media, 3.0 ft <sup>3</sup>
Underbedding, Type and Quantity	Cullsan® Underbedding, 12 lb	Cullsan Underbedding, 15 lb	Cullsan Underbedding, 20 lb	Cullsan Underbedding, 25 lb
Media, KDF-85	13.5 lb	13.5 lb	27.0 lb	40.5 lb
	17,854 gr @ 4.0 lb	26,781 gr @ 6.0 lb	31,200 gr @ 7.0 lb	42,548 gr @ 10.5 lb
Exchange Capacity  @ Salt Dosage Per Recharge	27,108 gr @ 8.0 lb	40,662 gr @ 12.0 lb	44,764 gr @ 16.0 lb	67,146 gr @ 24 lb
eg can bosage i ci iteoriarge	31,736 gr @ 12.0 lb	47,604 gr @ 18.0 lb	63,472 gr @ 24.0 lb	87,987 gr @ 36 lb
Efficiency rated dosage <sup>7</sup>	4,463 gr/lb @ 4 lb salt dosage	4,463 gr/lb @ 6 lb salt dosage	4,457 gr/lb @ 7 lb salt dosage	4,052 gr/lb @ 10.5 lb salt dosage
Freeboard to Media <sup>2</sup>	12 in	12 in	13.5 in	22.5 in
Freeboard to Underbedding <sup>3</sup>	44.5 in	47.5 in	46 in	59 in
Salt Storage Capacity		375 lb		600 lb
Service Flow @ Pressure Drop	8.0 gpm @ 9.5 psi	9.9 gpm @ 14 psi	8.5 gpm @ 9 psi	11.0 gpm @ 15 psi
Auxiliary Flow Rate	10.7 gpm @ 15 psi	10.8 gpm @ 15 psi	11.7 gpm @ 15 psi	11.0 gpm @ 15 psi
Total Hardness, Max.	50 gpg		75 gpg	
Total Dissolved Iron, Max 10ppm <sup>6</sup>	2000 gal	3000 gal	4000 gal	6000 gal
Flow Rate for Iron Reduction <sup>6</sup>	4 gpm	5.9 gpm	8.5 gpm	11.0 gpm
Hydrogen Sulfide <sup>1</sup>		2 p	pm	
Iron and Sulfur Reducing Bacteria <sup>1</sup>		Trace A	mounts	
рН		6.5-	-8.5	
Tannins		0.0	ppm	
Total Organic Carbon		0.0	ppm	
Free Chlorine Level		0.0	ppm	
Dissolved Oxygen		3.0 ppm	or below	
Polyphosphate		0.0	ppm	
Operating Pressure		20-125 psi (1	38–862 kPa)	
Operating Pressure (Canada)		20-90 psi (13	38–621 kPa)	
Operating Temperature	33-120°F (0–49°C)			
Electrical Requirements	28 VDC/60 Hz			
Electrical Power Consumption, Min/Max		8.4 watts/	21.6 watts	
Drain Flow, Maximum <sup>4</sup>	2.34 gpm	2.5 gpm	3.5 gpm	5.3 gpm
Recharge Time, Average <sup>5</sup> Recharge Water	78 minutes	67 minutes	62 minutes	76 minutes
Consumption, Average <sup>5</sup>	58.1 gallons	65.1 gallons	108.2 gallons	167.1 gallons

<sup>&</sup>lt;sup>1</sup> The Hydrogen Sulfide and Iron and Sulfur reducing bacteria performance are manufacturer claims and have not been evaluated or certified by WQA and IAPMO R&T.

<sup>&</sup>lt;sup>7</sup> The efficiency rated dosage is only valid at the stated salt dosage and is efficiency rated according to NSF/ANSI 44.



<sup>&</sup>lt;sup>2</sup> Measured from top of media to top surface of tank threads. (backwashed and drained).

<sup>&</sup>lt;sup>3</sup> Measured from top of underbedding to top surface of tank threads.

<sup>&</sup>lt;sup>4</sup> Backwash at 120 psi (830 kPa).

<sup>510</sup> minute backwash, 4 lb 9" model, 6 lb. 10" model, 7 lb. 12" model or 12 lb. 14" model salt dosage.
6 Performance testing on these models was performed at the flow rates specified. When a higher flow rate occurs upon installation, a flow control, restrictor, or other method of flow reduction should be used in order to mimic these performance results.

### Culligan High Efficiency Twin Softener—Downflow Regeneration

Model	9" Model	9" Model 10" Model 12" Model		14" Model
Control Valve	1" Reinforced Thermoplastic w/ HE Circuit Boards			
Overall Conditioner Ht	56 in	62 in	60 in	73 in
Media Tank Design		Quadr	a-Hull™	
Media Tank Dimensions (Dia x Ht)	9 x 48 in	10 x 54 in	12 x 52 in	14 x 65 in
Salt Storage Tank Dimensions (Dia x Ht)	18 x 43 in	18 x 43 in	18 x 43 in	24 x 42 in
Exchange Media, Type and Quantity	Cullex® Media, 1.0 ft3	Cullex Media, 1.5 ft3	Cullex Media, 2.0 ft3	Cullex Media, 3.0 ft3
Underbedding, Type and Quantity	Cullsan® Underbedding, 12 lb	Cullsan Underbedding, 15 lb	Cullsan Underbedding, 20 lb	Cullsan Underbedding, 25 lb
Exchange Capacity @ Salt	17,854 gr @ 4.0 lb	26,781 gr @ 6.0 lb	31,352 gr @ 7.0 lb	42,548 gr @ 10.5 lb
Dosage Per Recharge (per	27,108 gr @ 8.0 lb	40,662 gr @ 12.0 lb	48,458 gr @ 16.0 lb	75,582 gr @ 24 lb
tank)	31,736 gr @ 12.0 lb	47,604 gr @ 18.0 lb	59,267 gr @ 24.0 lb	88,549 gr @ 36 lb
Efficiency rated dosage¹ (per tank)	4,463 gr/lb @ 4 lb salt dosage	4,463 gr/lb @ 6 lb salt dosage	4,479 gr/lb @ 7 lb salt dosage	4,052 gr/lb @ 10.5 lb salt dosage
Freeboard to Media <sup>2</sup>	14.5 in	14.5 in	16 in	25 in
Freeboard to Underbedding³	44.5 in	47.5 in	46 in	59 in
Salt Storage Capacity	375 lb	375 lb	375 lb	600 lb
Rated Service Flow @ Pressure Drop	9.0 gpm @ 15 psi	9.4 gpm @ 12 psi	10.0 gpm @ 10 psi	10.6 gpm @ 11 psi
Auxiliary Flow Rate⁴	10.8 gpm @ 15 psi	11.0 gpm @ 15 psi	12.6 gpm @ 15 psi	12.8 gpm @ 15 psi
Total Hardness, Maximum	75 gpg	99 gpg	99 gpg	99 gpg
Total Iron, Maximum		5 ¡	ppm	
Hardness to Iron Ratio, Minimum		8 gpg t	o 1 ppm	
Operating Pressure		20-125 psi (	138–862 kPa)	
Operating Pressure (Canada)		20-90 psi (1	38–621 kPa)	
Operating Temperature		33-120°F	(0–49°C)	
Electrical Requirements	24V/60 Hz			
Electrical Power Consumption, Min/Max	8.4 watts/21.6 watts			
Drain Flow, Maximum⁵	1.98 gpm	2.0 gpm	2.86 gpm	5.3 gpm
Recharge Time, Average <sup>6</sup> Recharge Water	78 minutes	67 minutes	62 minutes	76 minutes
Consumption, Average <sup>6</sup>	53.1 gallons	82.2 gallons	102 gallons	167.1 gallons

<sup>&</sup>lt;sup>1</sup>The efficiency rated dosage is only valid at the stated salt dosage and is efficiency rated according to NSF/ANSI 44.



<sup>&</sup>lt;sup>2</sup>Measured from top of media to top surface of tank threads. (backwashed and drained).

<sup>&</sup>lt;sup>3</sup>Measured from top of underbedding to top surface of tank threads.

<sup>&</sup>lt;sup>4</sup> Auxiliary flow rates do not represent the maximum service flow rate used for determining the softener's rated capacity and efficiency. Continuous operation at these flow rates greater than the maximum service flow rate might affect capacity and efficiency performances. <sup>5</sup>Backwash at 120 psi (830 kPa).

<sup>&</sup>lt;sup>6</sup>10 minute backwash, 4 lb 9" model, 6 lb. 10" model, 7 lb. 12" model or 12 lb. 14" model salt dosage.

### Culligan High Efficiency Twin Softener—Upflow Regeneration

Model	9" Model	10" Model	
Control Valve	1" Reinforced Thermoplastic with HE Circuit Board		
Overall Conditioner Height	56 in	62 in	
Media Tank Design	Quad	ra-Hull™	
Media Tank Dimensions (Dia x Ht)	9 x 48 in	10 x 54 in	
Salt Storage Tank Dimensions (Dia x Ht)	18:	x 43 in	
Exchange Media, Type and Quantity	Cullex® Media, 1.0 ft3	Cullex Media, 1.5 ft3	
Underbedding, Type and Quantity	Cullsan® Underbedding, 12 lb	Cullsan Underbedding, 15 lb	
	9,792 gr @ 2.0 lb	15,314 gr @ 3.0 lb	
Exchange Capacity @ Salt Dosage Per Recharge (per tank)	17,366 gr @ 4.0 lb	47,726 gr @ 12.0 lb	
	27,306 gr @ 8.0 lb	54,975 gr @ 18.0 lb	
Efficiency Rated Dosage (per tank) <sup>1</sup>	4,896 gr/lb @ 2 lb salt dosage	5,105 gr/lb @ 3 lb salt dosage	
Proportional Brining Efficiency Rating (per tank) <sup>2</sup>	5,760 gr/lb @ 2 lb salt dosage	5,898 gr/lb @ 6 lb salt dosage	
Freeboard to Media <sup>3</sup>	14.5 in	14.5 in	
Freeboard to Underbedding <sup>4</sup>	44.5 in	47.5 in	
Salt Storage Capacity	375 lb		
Rated Service Flow @ Pressure Drop	9.0 gpm @ 15 psi	9.1 gpm @ 15 psi	
Auxiliary Flow Rate <sup>5</sup>	10.8 gpm @ 15 psi	11.0 gpm @ 15 psi	
Total Hardness, Maximum	31	0 gpg	
Total Iron, Maximum	2	ppm	
Hardness to Iron Ratio, Minimum	8 gpg	to 1 ppm	
Operating Pressure	20-125 psi	(138–862 kPa)	
Operating Pressure (Canada)	20-90 psi (	138–621 kPa)	
Operating Temperature	33-120°	F (0-49°C)	
Electrical Requirements	24V/60 Hz		
Electrical Power Consumption, Min/Max	8.4 watts/21.6 watts		
Drain Flow, Maximum <sup>6</sup>	2.0 gpm	2.0 gpm	
Recharge Time, Average <sup>7</sup> Recharge Water	68 minutes	57 minutes	
Consumption, Average <sup>7</sup> (Evaluated by WQA)	33 gallons	30.3 gallons	
Consumption, Average8 (Not evaluated by WQA)	25.5 gallons	27.5 gallons	

<sup>&</sup>lt;sup>1</sup>The efficiency rated dosage is only valid at the stated salt dosage and 5-minute backwash. It is efficiency rated according to NSF/ANSI 44.

<sup>&</sup>lt;sup>8</sup>2-minute backwash, 2 lb. 9" model, 6 lb. 10" model salt dosage. These values are based on the manufacturer recommended backwash time.



<sup>&</sup>lt;sup>2</sup>The Proportional Brining Efficiency Rating assumes a 20 percent reserve capacity at the time of regeneration that is typical of what the manufacturer expects under real-world operation. Proportional brining is not measured by NSF/ANSI44, and so this claim is not, and can not, be rated to NSF/ANSI44.

<sup>&</sup>lt;sup>3</sup>Measured from top of media to top surface of tank threads. (backwashed and drained).

<sup>&</sup>lt;sup>4</sup>Measured from top of underbedding to top surface of tank threads.

<sup>&</sup>lt;sup>5</sup> Auxiliary flow rates do not represent the maximum service flow rate used for determining the softener's rated capacity and efficiency. Continuous operation at these flow rates greater than the maximum service flow rate might affect capacity and efficiency performances. <sup>6</sup>Backwash at 120 psi (830 kPa).

<sup>&</sup>lt;sup>7</sup>5-minute backwash, 2 lb. 9" model, 6 lb. 10" model salt dosage. These values have been tested and certified by WQA.

### **Culligan High Efficiency Nitrate Reduction Conditioner\***

Model	9" Model 12" Model		14" Model
Control Valve	1" Reinforced Thermoplastic w/ HE Circuit Board		
Overall Conditioner Height	56 in	60 in	73 in
Media Tank Design		Quadra-Hull™ Tank	
Media Tank Dimensions (Dia x Ht)	9 x 48 in	12 x 52 in	14 x 65 in
Salt Storage Tank Dimensions (Dia x Ht)	18 x 43 in	18 x 43 in	24 x 42 in
Exchange Media, Type and Quantity	Nitrate Selective Resin, 1.0 ft <sup>3</sup>	Nitrate Selective Resin, 2.0 ft <sup>3</sup>	Nitrate Selective Resin, 3.0 ft <sup>3</sup>
Underbedding, Type and Quantity	Cullsan Underbedding, 12 lb	Cullsan Underbedding, 20 lb	Cullsan Underbedding, 25 lb
Nii 1 E I O ii	9,815 grains @ 8 lbs	19,630 grains @ 16 lbs	29,445 grains @ 24 lbs
Nitrate Exchange Capacity  @ Salt Dosage Per Recharge <sup>1</sup>	11,605 grains @ 10 lbs	23,210 grains @ 20 lbs	34,815 grains @ 30 lbs
G can bosage i ci recinarge	12,382 grains @ 15 lbs	24,764 grains @ 30 lbs	37,146 grains @ 45 lbs
Freeboard to Media <sup>2</sup>	16.5	16	25
Freeboard to Underbedding <sup>3</sup>	44.5	46	59
Salt Storage Capacity	375 lb	375 lb	600 lb
Rated Service Flow @ Pressure Drop	4 gpm @ 3.0 psi	8 gpm @ 6.9 psi	12 gpm @ 14.3 psi
pH Range		4.5–8.5	
Total Hardness, Maximum		10 gpg	
Total Iron, Maximum		0.1 ppm	
Turbidity, Maximum		5 NTU	
Chlorine, Maximum		0.05 ppm	
Total Organic Carbon		3.0 ppm	
Operating Pressure		20-125 psi (138–862 kPa	)
Operating Pressure (Canada)	20-90 psi (138–621 kPa)		
Operating Temperature	33-120°F (0-49°C)		
Electrical Requirements		24VAC/60 Hz	
Electrical Power Consumption, Min/Max	8.4 watts/21.6 watts		
Drain Flow, Maximum <sup>4</sup>	1.2 gpm	2.0 gpm	2.0 gpm

 $<sup>^{1}</sup>$ The capacity ratings are based on the grains of 30 mg/L nitrate (NO $_{3}$ .) as N and 44 mg/L sulfate (SO $_{4-2}$ ) expressed in grains per gallon (gpg) as calcium carbonate (CaCO $_{3}$ ) and is related to the pounds of salt required for each regeneration. A complete water analysis is required to calculate actual Nitrate capacities. See Capacity Guide inside of manual to calculate Nitrate capacity.



<sup>&</sup>lt;sup>2</sup>Measured from top of media to top surface of tank threads (backwashed and drained).

<sup>&</sup>lt;sup>3</sup>Measured from top of underbedding to top surface of tank threads.

<sup>&</sup>lt;sup>4</sup>Backwash at 120 psi (830 kPa).

 $<sup>^{5}</sup>$ 10 minute backwash, 10 lb 9" model, 20 lb. 12" model or 30 lb. 14" model salt dosage.

<sup>\*</sup>Culligan High Efficiency Nitrate Reduction Conditioner is not WQA certified.

### Culligan High Efficiency Softener—1.25"

Model	10"	12"	14"	16"
Control Valve	11/4'	' Reinforced Thermopla	stic with GBE Circuit Bo	pard
Overall Conditioner Height	62 in	60 in	73 in	73 in
Media Tank Design	Quadra-Hull™	Quadra-Hull™	Quadra-Hull™	Quadra-Hull™
Media Tank Dimensions (Dia x Ht)	10 x 54 in	12 x 52 in	14 x 65 in	16 x 65 in
Salt Storage Tank Dimensions (Dia x Ht)	18 x 43 in	18 x 43 in	24 x 40 in	24 x 40 in
Exchange Media, Type and Quantity	Cullex <sup>®</sup> Media, 1.5 ft <sup>3</sup>	Cullex® Media, 2.0 ft <sup>3</sup>	Cullex® Media, 3.0 ft <sup>3</sup>	Cullex® Media, 4.0 ft <sup>3</sup>
Underbedding, Type and Quantity	Cullsan <sup>®</sup> Underbedding, 15 lb	Cullsan <sup>®</sup> Underbedding, 20 lb	Cullsan <sup>®</sup> Underbedding, 25 lb	Cullsan <sup>®</sup> Underbedding, 30 lb
Exchange Capacity @ Salt Dosage Per Recharge	28,109 gr @ 6.0 lb 41,587 gr @ 12.0 lb 45,831 gr @ 18.0 lb	35,247 gr @ 8.0 lb 54,191 gr @ 16.0 lb 64,053 gr @ 24.0 lb	56,218 gr @ 12.0 lb 83,174 gr @ 24.0 lb 91,662 gr @ 36.0 lb	70,494 gr @ 16.0 lb 108,382 gr @ 32.0 lb 128,106 gr @ 48.0 lb
Efficiency Rated Dosage <sup>1</sup>	4,685 gr/lb @ 6 lb salt dosage	4,406 gr/lb @ 8 lb salt dosage	4,685 gr/lb @ 12 lb salt dosage	4,406 gr/lb @ 16 lb salt dosage
Freeboard to Media <sup>2</sup>	14.5 in	16 in	25 in	25 in
Freeboard to Underbedding <sup>3</sup>	47.5 in	46 in	59 in	59 in
Salt Storage Capacity	375 lb	375 lb	600 lb	600 lb
Rated Service Flow @ Pressure Drop	14.9 gpm @ 15 psi	17.9 gpm @ 15 psi	19.3 gpm @ 15 psi	21.0 gpm @ 15 psi
Total Hardness, Maximum	99 gpg	99 gpg	99 gpg	99 gpg
Total Iron, Maximum	5 ppm	5 ppm	5 ppm	5 ppm
Hardness to Iron Ratio, Minimum	8 gpg to 1 ppm	8 gpg to 1 ppm	8 gpg to 1 ppm	8 gpg to 1 ppm
Operating Pressure	20-125 psi	20-125 psi	20-125 psi	20-125 psi
Operating Pressure (Canada)	20-90 psi	20-90 psi	20-90 psi	20-90 psi
Operating Temperature	33-120°F	33-120°F	33-120°F	33-120°F
Electrical Requirements	28VDC	28VDC	28VDC	28VDC
Electrical Power Consumption, Min/Max	8.4 Watts/21.6 Watts	8.4 Watts/21.6 Watts	8.4 Watts/21.6 Watts	8.4 Watts/21.6 Watts
Drain Flow, Maximum <sup>4</sup>	2.38 gpm	3.88 gpm	5.5 gpm	5.5 gpm
Recharge Time, Average <sup>5</sup>	85 min	84 min	82 min	96 min
Recharge Water Consumption, Average <sup>5</sup>	79.9 gal	113.1 gal	183.9 gal	250 gal

<sup>&</sup>lt;sup>1</sup>The efficiency rated dosage is only valid at the stated salt dosage and is efficiency rated according to NSF/ANSI 44. 
<sup>2</sup>Measured from top of media to top surface of tank threads. (backwashed and drained).

<sup>3</sup>Measured from top of underbedding to top surface of tank threads.



 $<sup>^4\</sup>text{Backwash}$  at 120 psi (830 kPa).  $^510$  minute backwash, 6 lb 10" model, 8 lb. 12" model, 12 lb. 14" model or 16 lb. 16" model salt dosage.

### **Application & Operation**

### It's All So Easy, So Economical, So Efficient, So Enjoyable!

### **Kind To Skin And Complexion**

Soft water will help prevent red, itchy or dry skin because there are no hardness impurities to cause soreness, no soap scum to coat the skin. Shaving is easier, smoother—either with a blade or electric shaver.

### **Bathing And Showering**

You'll use far less soap with conditioned water. Use your soap very sparingly—not as you did before soft water. Just a quick rinse removes all lather, leaving your skin pleasantly smooth and silky because now it's free of sticky soap curd and film.

### Saves Washing Costs. Helps Control Environmental Pollution

Soft water washes whiter and cleaner with less soap or detergent. Because the hardness impurities are removed, your soap can concentrate solely on washing. People usually find that they can reduce the amount of soap they use substantially. If you normally use a cup per wash load with hard water, try using 1/3 cup depending on the size of your wash load and the degree of soil. Different amounts are required, but you can use less with softened water. An added bonus is the fact that your washable fabrics will last longer.

### **Super Hair Conditioning**

Soft water is great for scalp and hair care. No insoluble deposits are formed. Hair is shinier, softer, more manageable. Reduce the amount of shampoo you have normally used.

### Dishes Are A Delight

Washed by hand or in a dishwasher, glassware, dishes, and silver wash cleaner and easier. Follow your dishwasher manufacturer's instructions. Soft water promotes sanitation because no greasy hard water film can form to collect or harbor bacteria.

### **Easier Housekeeping, Gleaming Fixtures**

You'll be amazed at the marvelous difference. Just a swish of the cloth, and the bathtub or shower and fixtures are clean and sparkling. Imagine, no scouring! No hard water scum to cause rings, streaks, spots, and stains. To keep their gleaming luster, simply wipe fixtures with a towel after use. Formica, tile, walls, floors, woodwork surfaces clean easier, stay clean longer. You'll save on cleaning aids and save on time.

### Saves Water-Heating Energy, Helps Water-Using Appliances

Soft water reduces the formation of rock-like hard water scale that encrusts water heaters, hot water pipes, shower heads, and water-using appliances. This scale can cause premature maintenance and failure.

Elimination of hard water also provides substantial energy savings because scale acts as an insulator, wasting electricity or gas used to heat water.

### **Water For Lawns And Household Plants**

If possible, lawn sprinkling faucets should be supplied with hard water primarily because it is not economical to soften so much water.

Household plants are much more sensitive than lawns with respect to the kind of water which is best. First, because they receive no rainfall and, second, there is little or no drainage of the soil. Preferably they should be watered with rainwater or water which is low in mineral content such as distilled or demineralized water. Softened water is not recommended for house plants because a build-up of sodium in the soil may interfere with efficient absorption of water by the plant root system. Additional information may be obtained from your independently operated Culligan dealer.

### **Culligan Municipal Softener**

With the Culligan Municipal softener you will experience the above benefits in addition to the reduction of chlorine taste and odor for a fresh, clean taste and smell.



### Why Water Gets Hard And How It Is Softened

All of the fresh water in the world originally falls as rain, snow, or sleet. Surface water is drawn upward by the sun, forming clouds. Then, nearly pure and soft as it starts to fall, it begins to collect impurities as it passes through smog and dust-laden atmosphere. And as it seeps through soil and rocks it gathers hardness, rust, acid, unpleasant tastes and odors.

Water hardness is caused primarily by limestone dissolved from the earth by rainwater. Because of this, in earlier times people who wanted soft water collected rainwater from roofs in rain barrels and cisterns before it picked up hardness from the earth.

Some localities have corrosive water. A softener cannot correct this problem and so its written warranty disclaims liability for corrosion of plumbing lines, fixtures or appliances. If you suspect corrosion, your Culligan dealer has equipment to control the problem.

Iron is a common water problem. The chemical/physical nature of iron found in natural water supplies is exhibited in four general types:

#### 1. Dissolved Iron—

Also called ferrous or "clear water" iron. This type of iron can be removed from the water by the same ion exchange principle that removes the hardness elements, calcium and magnesium. Dissolved iron is soluble in water and is detected by taking a sample of the water to be treated in a clear glass. The water in the glass is initially clear, but on standing exposed to the air, it may gradually turn cloudy or colored as it oxidizes.

#### 2. Particulate Iron-

Also called ferric or colloidal iron. This type of iron is an undissolved particle of iron. A softener will remove larger particles, but they may not be washed out in regeneration effectively and will eventually foul the ion exchange resin. A filtering treatment will be required to remove this type of iron.

#### 3. Organic Bound Iron—

This type of iron is strongly attached to an organic compound in the water. The ion exchange process alone cannot break this attachment and the softener will not remove this type of iron.

#### 4. Bacterial Iron-

This type of iron is protected inside a bacteria cell. Like the organic bound iron, it is not removed by a water softener.

When using a softener to remove both hardness and dissolved iron it is important that it regenerates more frequently than ordinarily would be calculated for hardness removal alone. Although many factors and formulas have been used to determine this frequency, it is recommended that the softener be regenerated when it has reached 50–75% of the calculated hardness alone capacity. This will minimize the potential for bed fouling. (Iron removal claims have not been verified by the Water Quality Association, except for High Efficiency Softener-Cleer and Softener-Cleer Plus models.)

If you are operating a water softener on clear water iron, regular resin bed cleaning is needed to keep the bed from coating with iron. Even when operating a softener on water with less than the maximum of dissolved iron, regular cleaning should be performed. Clean every six months or more often if iron appears in your conditioned water supply. Use resin bed cleaning compounds carefully following the directions on the container.

NOTE! Do not use where the water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit.



### **The Culligan Process**

Your Culligan water conditioner consists of three basic components, (A) the Control Valve, (B) the Mineral Tank, and (C) the Brine System.

### A. Control Valve

The exclusive Culligan control valve automatically performs a variety of tasks that are necessary for the proper operation of your water conditioner. These tasks, commonly referred to as cycles or operating positions, are **Service**, **Regeneration**, and **Brine Refill**.

- 1. Service: While the control valve is in the service cycle, hard water is directed down through the column of Cullex® resin where hardness minerals are removed from the water. The softened water is then directed into your household plumbing lines. The ability of the Cullex resin to remove hardness minerals needs to be periodically replenished; this is referred to as Regeneration.
- 2. Regeneration: While the control valve is in the regeneration cycle, water is first directed up through the column of Cullex resin to flush accumulated sediment out of the resin and down the drain. Then, the regenerant brine solution is slowly drawn from the bottom of the salt storage tank of the Brine System and is directed down through the column of Cullex resin, restoring the ability of the resin to remove hardness minerals from your water supply. Once completed, the regeneration cycle is followed by Brine Refill.
- 3. Brine Refill: While the control valve is in the brine refill cycle, a predetermined amount of water is directed to the salt storage tank of the Brine System so that additional salt can be dissolved to provide the brine solution that will be needed for the next regeneration cycle.



### **B. The Mineral Tank**

The Mineral Tank contains the Cullex resin column, Cullsan® underbedding, and an outlet manifold (the Culligan Municipal also includes carbon media for chlorine taste & odor reduction). The number of gallons of hard water that can be softened by the Cullex resin column before it needs regeneration is called the "capacity" of the resin column, and depends upon the amount of hardness minerals in each gallon of water (expressed as grains per gallon) and upon the amount of regenerant brine solution (expressed as pounds of salt) passed through the resin column during regeneration.

Your Culligan service person, taking into account the hardness of your water and the amount of softened water your household may reasonably expect to use each day, has carefully established how often the softener will regenerate and how much salt will be used for each regeneration. This will ensure that all of your soft water needs will be fulfilled without using an excessive amount of salt.

### C. The Brine System

The Brine System consists of a salt storage container and hydraulic Dubl-Safe<sup>™</sup> valve. The salt storage container holds the salt that is used to make the regenerant brine solution. The hydraulic Dubl-Safe valve limits the amount of water that is returned to the salt storage tank during the brine refill cycle.

Because a predetermined amount of salt is dissolved with each brine refill cycle, the salt must be periodically replenished in order to maintain efficient operation. Your Culligan service person will be able to tell you about how often salt must be added to the salt storage container.



### **Modes of Operation**

### **Water Meter Mode**

In water meter mode, the controller keeps track of the quantity of water that has flowed through the resin bed. Based on the influent water hardness and the hardness capacity of the resin bed, a service life expectancy in the quantity of softened water is calculated and programmed into the control. When the set point is reached, regeneration is triggered. If the predict mode is not selected the regeneration will start at time of regeneration. In immediate mode the regeneration starts as soon as the regeneration signal is provided. If time clock backup is set and the capacity has not been exhausted but the days since last regen is greater than time clock backup, setting the softener will immediately regenerate.

### Agua-Sensor® Mode

The Aqua-Sensor is a conductivity probe that senses when the hardness front passes through the resin bed. It functions independently of the influent water hardness so therefore, is useful in conditions when the influent water hardness varies throughout the year. It provides for the most efficient mode of operation. In addition to sensing when a resin bed is exhausted, it can also be used to determine when the brine solution is rinsed from the resin bed during the Brine Draw/ Slow Rinse cycle triggering the control to move to fast rinse. This patented feature provides water savings by optimizing the amount of rinse water required to completely rinse out the resin bed.

#### **Predict Mode**

The Predict Mode is used with the flow meter to determine the optimum regeneration point. Before the regeneration starts, the control will compare the remaining capacity value with the average daily water use. If the average daily water usage is less than the reserve capacity, the controller will wait 24 more hours before regeneration. If the reserve capacity is less than the average daily water usage, the control will initiate regeneration. This works in delay mode only. At any time, if the total capacity value is reached, the control will initiate an immediate regeneration.

#### **Pre-Rinse Mode**

The Pre-rinse mode is used to pre-rinse the softener resin bed or filter media. The pre-rinse in flow meter mode will occur after the control has sensed that no water has flowed through the control for a period of X hours (can be set through the programming menu). When the control is in this mode, once the X amount of hours have elapsed the control will cycle to the fast rinse position for the pre-set length of minutes and then return to the home or service position.

#### Down Flow Regeneration

Water and regenerate flow downward through the media tank.

### Up Flow Regeneration

Water flow is downward and regenerate flow is upward through the media tank. The significance of this is that regeneration will be most effective in those parts of the resin bed which are treated with the freshest regenerate solution. There will tend to be less hardness leakage with up-flow regeneration.

### **Proportional Brining**

The control monitors your softened water usage making only enough brine to regenerate that part of the resin bed that has been exhausted. In this way the amount of salt used relates directly to the amount of softened water used, making it more efficient and cost effective. Proportional brining can only be used with upflow regeneration. The Aqua-Sensor or meter can be used to initiate a regeneration.

### Dial-A-Softness®

Dial-A-Softness is a manual adjustment built into the control valve that allows for variable hardness bypass into the softened water. The hard water bypass can be adjusted from 0% to 30%. The Dial-A-Softness also increases the softener capacity in proportion to the percent hard water bypass (less salt used).

### Manual Regeneration

Manual regeneration can be initiated via the softener control valve or wireless remote display. Manual regeneration can be initiated to begin regeneration immediately or that night. To immediately initiate regeneration,

press and hold  $\checkmark$  for at least ten (10) seconds. To cancel a delayed regeneration, press and hold  $\checkmark$  for at least five (5) seconds.



### Salt Supply

Salt is the mineral used to regenerate your water conditioner. A brine solution is automatically made up in the bottom of the salt storage container, the Cullex® resin beads in the mineral tank are flushed with the brine solution as a step in the regenerating process.

Your Culligan Water Conditioner has been carefully designed to get the greatest amount of softening capacity from the salt it uses. Here is some pertinent information about salt usage, types and service.

#### Salt Economizer

This control is set at the time of installation, and determines salt usage according to the water hardness, number of persons in the household, and water usage.

#### What Kind of Salt is Best

All Culligan Water Conditioners are designed to use any water conditioner salt of good quality, including rock, pellet, solar, or "evaporated" types.

All rock salt, regardless of source, contains insoluble material which collects at the bottom of the salt storage tank and requires periodic clean-out.

If purified salt products are used, the salt storage compartment will require less frequent clean-out, but you must check more frequently for "bridging."

Regardless of what type of salt is used, we recommend Culligan Brand Salt as suggested by your Culligan Dealer. He or she is the expert and can provide you with the best product for your Culligan Water Conditioner.

### **Automatic Salt Delivery Service**

Ask your Culligan Dealer for details about salt delivery service. You can have your salt supply replenished on a regular basis. Whether you have automatic delivery service or pick up salt from your Culligan Dealer, you will be getting quality salt packaged according to rigid Culligan specifications. Using Culligan Brand Salt will help assure continued efficiency and trouble-free operation of your water conditioner.

The modem allows for the system to be remotely monitored, detecting problems before they occur, to schedule salt delivery when it is needed and to keep the system software up to date with the latest advances.

NOTE! Sodium Information: Water softeners using sodium chloride for regeneration add sodium to the water.

Those on sodium restricted diets should consider the added sodium as part of their overall sodium intake.



### **Care & Cleaning**

Following these simple precautions will help assure continued trouble-free service and keep your Culligan Water Conditioner looking like new for years.

- Do not place heavy objects on top of the salt storage tank or timer cover.
- Use only mild soap and warm water when cleaning the exterior of the conditioner. Never use harsh, abrasive cleaning compounds or those which contain acid, such as vinegar, bleach and similar products.
- · Important: Protect your water conditioner and the entire drainline from freezing temperatures.



#### **WARNING!**

If your unit should freeze, do not attempt to disassemble it. Call your Culligan Dealer.

- Important: Culligan water softeners are sold for use on potable water only. If at any time the water becomes contaminated, such as during a "boil water" advisory, the operation of the water softener should be discontinued until it is verified that the water is again potable. To do this, turn the blue knob in a clockwise position, then call your Culligan dealer to have your system sanitized before it is placed back into service.
- Should service, adjustment or trouble-shooting information be needed which is not covered in the Use and Care Guide, call your Culligan Dealer.

For parts and service availability please call your local independently operated Culligan dealer. For your nearest Culligan dealer, call (800) 285-5442.

### Cleaning Out the Salt Storage Tank

A periodic clean-out of the Salt Storage Tank is necessary to keep your Culligan Water Conditioner at peak operating efficiency. Do it at least every two years when the salt supply is low. Follow these step-by-step procedures:

#### **Tools Needed**

- Scoop
- · Clean, bucket-size container
- Garden hose
- · Household scrub brush or sponge

#### **Procedure**

- 1. Remove the salt storage tank cover and the cap from the brine valve chamber.
- 2. Disconnect the brine line from the brine valve by holding the outer ring of the push fitting; push the tubing in slightly before pulling it out.
- 3. Lift the brine valve out of the brine valve chamber and set aside in an upright position.
- 4. If you'd like to save any clean, dry salt remaining in the tank, remove it and place it in a clean container.
- 5. Using the scoop, dig out and discard as much remaining salt, water and debris as possible.
- 6. Remove the brine valve chamber by removing the screws on either side of the salt tank.
- 7. Remove the salt plate at the bottom of the brine tank.
- 8. Lay the salt tank on its side and direct a brisk stream of water from your garden hose to its inside to rinse out all residue.
- 9. Using a household scrub brush and a mild soapy solution, clean the salt plate. This will complete the tank cleaning.
- 10. Insert the brine valve into the chamber and replace brine valve chamber cap.(Re-insert the brine valve into the chamber, re-insert the brine line fully, and replace brine valve chamber cap.)
- 11. Fill the salt storage tank with 4 to 6 inches of water.
- 12. Fill the tank with salt to within a few inches of the top.
- 13. Replace salt storage tank cover.

If tastes and odors return frequently, even after sanitization, a continuous chlorination system may be needed. Contact your local Culligan dealer for water bacterial analysis.



### Sanitizing

A water softener in daily use on a potable water supply generally requires no special attention other than keeping the salt tank filled. Occasionally, however, a unit may require sanitization under one of the following conditions:

- · At start-up time.
- After standing idle for a week or more.
- On private supplies, the appearance of off-tastes and odors, particularly if musty or "rotten egg" (caused by harmless sulfate-reducing bacteria).

NOTE! If the water supply contains iron, regenerate the softener before sanitizing to remove iron from the resin.



#### **CAUTION!**

Hazard from toxic fumes! Chlorine bleach and common iron control chemicals may generate toxic fumes when mixed.

#### **CAUTION!**

Do not use this procedure if the softener salt contains iron control additives.

If the unit uses any compounds containing sodium hydrosulfite, sodium bisulfite, or any other reducing agent, disconnect the device feeding the chemical(s) and manually regenerate the unit before sanitizing.

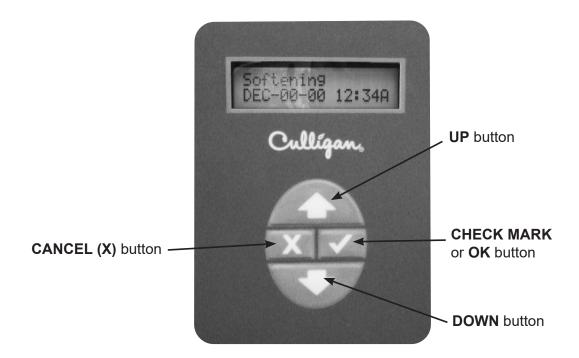
Do not use this procedure if the softener salt contains iron control additives.

- 1. Remove the brine tank cover.
- 2. Pour directly into the brine chamber 1/3 to 1/2 cup of unscented 6% household bleach for each cubic foot of resin in the tank.
- 3. Manually start recharge. Allow the unit to complete the recharge cycle automatically.

If tastes and odors return frequently, even after sanitization, a continuous chlorination system may be needed. Contact your local Culligan dealer for water bacterial analysis See <u>page 2</u> for more information.



### **Menu Navigation**





UP ARROW button: scrolls up the menu



DOWN ARROW button: scrolls down the menu



**CHECK MARK** button: selects the highlighted option, opens a new screen, or accepts a changed setting



**CANCEL** or **X** button: returns to the previous screen or cancels a changed setting

NOTE! Hold down or to quickly scroll through the setting without repeatedly pressing the button.

**NOTE!** The control must be returned to the HOME screen if settings are changed.

Use the Culligan Connect™ app to update the date or time.



### Regeneration

REGEN Tonite when the control has signaled for a regeneration. Regenerating is displayed while the control is in regeneration. The following are conditions that will call for regeneration:

- 1. When the Soft-Minder® meter has recorded the passage of a predetermined number of gallons.
- 2. When the Aqua-Sensor® Probe senses the hardness in the Cullex Media.
- 3. At the preset time, when the number of days without a regeneration is equal to the regeneration interval (timeclock backup) setting.
- 4. At the preset time, when Regen Tonite is selected. The screen displays Regen Tonite.
- 5. Immediately, when the Regen Now is selected. The screen displays Regenerating.
- 6. Immediately, if power to the unit has been off for more than three hours and the time of day has been restored.
- 7. At the preset time based on "Day-of-Week" Regeneration setting.

Use the Culligan Connect™ app or follow any of the procedures that follow to initiate a manual regeneration.

### **Delayed Regeneration**

Screen Display	Range	Setting Description	
SOFTENING JAN-01-18 12:01P	N/A	1.	From the <b>HOME</b> screen, press and hold for at least three (3)seconds and then release the button.
	Regen Tonite	2.	The screen displays the regeneration status on the first line of the display. The system will regenerate at a scheduled time.
	Regen Off	3.	To cancel a delayed regeneration, press and hold for at least three (3) seconds and then release the button. The screen displays the new status.

### **Immediate Regeneration**

Screen Display	Range	Setting Description	
	N/A	<ol> <li>From the HOME screen, press  and hold for at leaten (10) seconds.</li> </ol>	
	Regen Now	The screen displays the regeneration status on the fi line of the display. The softener will initiate an immedia regeneration.	
	N/A	3. The first line of the screen displays <b>REGENERATING</b>	



### When & How to Bypass Your System

Normally, all water except outside lines passes through the water softener. There are times when the water softener should be bypassed, using the Cul-Flo-Valv<sup>®</sup> Bypass, or a three-way bypass valve. You should bypass:

- 1. If lines to outside faucets do not bypass the water softener, and you do not want to waste softened water on lawn sprinkling or other outside uses.
- 2. If you are going away on vacation and do not want the unit to recharge.

### **Bypass Valve**

In the back of Culligan water softener is a Cul-Flo-Valv® Bypass valve. To bypass the unit, turn the blue knob clockwise. To return to softened water service, turn the blue knob counter-clockwise.

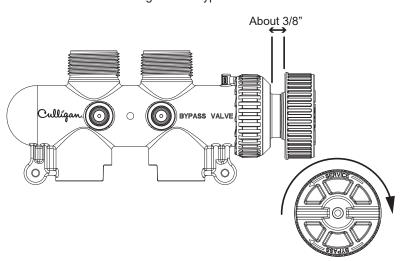


Figure 1. Bypass valve

### **Bypassed**

To BYPASS, turn the blue knob clockwise (see directional arrow on end of knob) until the knob stops as shown in <u>Figure 1</u>. DO NOT OVERTIGHTEN!

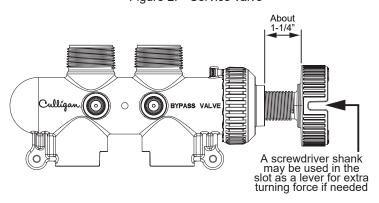


Figure 2. Service valve

#### **Softened Water**

To return to SERVICE, turn the blue knob counter-clockwise (see directional arrow on end of knob) until the knob stops as shown in <u>Figure 2</u>. DO NOT OVERTIGHTEN!



### Things to Check Before You Call For Service

If you unexpectedly experience a change in the quality of your water, make these simple checks before calling your Culligan dealer. One of the following conditions may be the reason for the change.

### **Important**

If any of the following conditions is found, the water softener should be manually regenerated according to instructions on "Regeneration" on page 24 after you have corrected the problem.

### **Power Supply**

Check your power supply cord. Is it plugged fully into the electric outlet? Be certain that the outlet is not controlled by a wall switch which has been turned off. Plug in the transformer then reset conditioner to the correct time of day.

### **Tripped Circuit Breaker**

Check the house circuit breaker panel. Reset a tripped circuit breaker.

#### **Power Failure**

Any interruption in your power supply or time change—such as daylight savings—will disrupt your softener's regeneration schedule by causing the timer to run off-schedule. Reset the timer to the correct time of day.

### **Bypass Valves**

Check to see if they are in the proper position. Cul-Flo-Valv<sup>®</sup> Bypass, if used, should be in the "Service" position (handle screwed out). If hand valves are used, see that inlet and outlet valve are opened and that the bypass valve is closed.

#### No Water

If you aren't getting any water flow at all, make sure your water supply is working. Open a tap ahead of the conditioner (outside tap) to see if you have any water pressure. If you have water pressure, check the bypass valve. If it is in the Service position, put it into the bypass and call your Culligan dealer for service.

#### **Increased Usage**

Guests, family additions, new water-using appliances, etc., will result in more water usage and may require additional programming by your local Culligan dealer. Please contact your local Culligan dealer.

#### Salt Level in Brine Tank

If there is no salt in the brine tank, add salt.



### **Performance Data Sheets**

### Culligan High Efficiency 9" and 9" Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 9" Water Softener with Soft-Minder® Meter

#### **Testing Conditions & Results:**

 Flow Rate:
 9.0 gpm @ 12 psi
 Capacity:
 17,854 grains @ 4.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 27,108 grains @ 8.0 lb. salt

 Acidity:
 Non-Corrosive
 31,736 grains @ 12.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,463 gr/lb

#### **Softener Specifications:**

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 12 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.5 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Series 9" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



The Culligan High Efficiency 9" Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2044a. The Culligan High Efficiency 9" Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20607.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 4 lb salt dosage and maximum service flow rate for 9" models.



# Culligan High Efficiency 9" and 9" Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800

www.culligan.com

Product: Culligan High Efficiency 9" Water Softener with Agua-Sensor® Sensing Device

**Testing Conditions & Results:** 

 Flow Rate:
 9.0 gpm @ 12 psi
 Capacity:
 17,854 grains @ 4.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 27,108 grains @ 8.0 lb. salt

 Acidity:
 Non-Corrosive
 31,736 grains @ 12.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,463 gr/lb

**Softener Specifications:** 

**NOTICE** 

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 12 psi

Operating Temp. Range: 33–120°F (0–49°C)

Max. Drain Flow Rate: 2.5 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency 9" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 9" Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2044b. The Culligan High Efficiency 9" Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20607.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



<sup>†</sup>The efficiency rated dosage is only valid at the 4 lb salt dosage and maximum service flow rate for 9" models.

# Culligan High Efficiency 10" and 10" Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 10" Water Softener with Soft-Minder® Meter

### **Testing Conditions & Results:**

 Flow Rate:
 9.4 gpm @ 12 psi
 Capacity:
 26,781 grains @ 6.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 40,662 grains @ 12.0 lb. salt

 Acidity:
 Non-Corrosive
 47,604 grains @ 18.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,463 gr/lb

### **Softener Specifications:**

Service Flow Rate: 9.4 gpm Pressure Drop at Max. Flow Rate: 12 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.5 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.4 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.4 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Series 10" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 10" Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2043b. The Culligan High Efficiency 10" Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20608.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 6 lb salt dosage and maximum service flow rate for 10" models.



# Culligan High Efficiency 10" and 10" Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 10" Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

 Flow Rate:
 9.4 gpm @ 12 psi
 Capacity:
 26,781 grains @ 6.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 40,662 grains @ 12.0 lb. salt

 Acidity:
 Non-Corrosive
 47,604 grains @ 18.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,463 gr/lb

### **Softener Specifications:**

Service Flow Rate: 9.4 gpm Pressure Drop at Max. Flow Rate: 12 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.5 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.4 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.4 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency 10" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



The Culligan High Efficiency 10" Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2043a. The Culligan High Efficiency 10" Water Softeners with Aqua-Sensor® Sensing Device are registered under lowa Water Treatment Device Registration Number 20608.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



<sup>&</sup>lt;sup>†</sup>The efficiency rated dosage is only valid at the 6 lb salt dosage and maximum service flow rate for 10" models.

# Culligan High Efficiency 12" and 12" Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 12" Water Softener with Soft-Minder® Meter

### **Testing Conditions & Results:**

 Flow Rate:
 10.0 gpm @ 11 psi
 Capacity:
 31,352 grains @ 7.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 48,458 grains @ 16.0 lb. salt

 Acidity:
 Non-Corrosive
 59,267 grains @ 24.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,479 gr/lb

### **Softener Specifications:**

Service Flow Rate: 10.0 gpm Pressure Drop at Max. Flow Rate: 11 psi (71 kPa)

Operating Temp. Range: 33–120°F (0–49°C)

Max. Drain Flow Rate: 4.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.0 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.0 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Series 12" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

Water Quality (a) Water Qualit

The Culligan High Efficiency 12" Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2046b. The Culligan High Efficiency 12" Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20609.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 8 lb salt dosage and maximum service flow rate for 12" models.



# Culligan High Efficiency 12" and 12" Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 12" Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

 Flow Rate:
 10.0 gpm @ 11 psi
 Capacity:
 31,352 grains @ 7.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 48,458 grains @ 16.0 lb. salt

 Acidity:
 Non-Corrosive
 59,267 grains @ 24.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,479 gr/lb

### **Softener Specifications:**

Service Flow Rate: 10.0 gpm Pressure Drop at Max. Flow Rate: 11 psi (71 kPa)

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 4.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.0 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.0 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency 12" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 12" Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2046a. The Culligan High Efficiency 12" Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20609.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 8 lb. salt dosage and maximum service flow rate for 12" models.



# Culligan High Efficiency 14" and 14" Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 14" Water Softener with Soft-Minder® Meter

**Testing Conditions & Results:** 

Flow Rate: 10.6 gpm @ 11 psi Capacity: 42,548 grains @ 10.5 lb. salt Pressure: 30–40 psi (2.1–2.8 kg/cm2) 67,146 grains @ 24.0 lb. salt Acidity: Non-Corrosive 87,987 grains @ 36.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,052 gr/lb

**Softener Specifications:** 

Service Flow Rate: 10.6 gpm Pressure Drop at Max. Flow Rate: 11 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 5.3 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.6 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.6 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Series 14" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



The Culligan High Efficiency 14" Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2045b. The Culligan High Efficiency 14" Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20610.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 12 lb. salt dosage and maximum service flow rate for 14" models.



# Culligan High Efficiency 14" and 14" Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 14" Water Softener with Aqua-Sensor® Sensing Device

**Testing Conditions & Results:** 

Flow Rate: 10.6 gpm @ 11 psi Capacity: 42,548 grains @ 10.5 lb. salt Pressure: 30–40 psi (2.1–2.8 kg/cm2) 67,146 grains @ 24.0 lb. salt Acidity: Non-Corrosive 87,987 grains @ 36.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,052 gr/lb

**Softener Specifications:** 

Service Flow Rate: 10.6 gpm

Pressure Drop at Max. Flow Rate: 11 psi
Operating Temp. Range: 33–120°F (0–49°C)

Max. Drain Flow Rate: 5.3 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm2)

Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.6 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.6 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency 14" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 14" Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2045a. The Culligan High Efficiency 14" Water Softeners with Aqua-Sensor® Sensing Device are registered under lowa Water Treatment Device Registration Number 20610.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 12lb. salt dosage and maximum service flow rate for 14" models.



### Culligan High Efficiency 9" Upflow and 9" Upflow Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Culligan International Company Manufacturer:

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 9" Upflow Water Softener with Soft-Minder® Meter

### **Testing Conditions & Results:**

Flow Rate: 9.0 gpm @ 11 psi Capacity: 9,792 grains @ 2.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm2) 17,366 grains @ 4.0 lb. salt Acidity: Non-Corrosive 27,306 grains @ 8.0 lb. salt

68°F (20°C) Temperature: pH: 76

Efficiency Rated Dosage<sup>†</sup>: 4,896 gr/lb

### Softener Specifications:

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 11 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.2 gpm

Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm<sup>2</sup>) Working Press. Range: 20-125 psi (1.4-8.5 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Series 9" Upflow Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 9" Upflow Water Softeners with Soft-Minder Meter® are registered under California Water Treatment Device Registration Number 2044c. The Culligan High Efficiency 9" Upflow Water Softeners with Soft-Minder Meter® are registered under lowa Water Treatment Device Registration Number 20607.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ ANŠI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 2 lb. salt dosage and maximum service flow rate for 9" models.



# Culligan High Efficiency 9" Upflow and 9" Upflow Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 9" Upflow Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

 Flow Rate:
 9.0 gpm @ 11 psi
 Capacity:
 9,792 grains @ 2.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 17,366 grains @ 4.0 lb. salt

 Acidity:
 Non-Corrosive
 27,306 grains @ 8.0 lb. salt

68°F (20°C) pH: 7.0

Temperature: 68°F (20°C Efficiency Rated Dosage<sup>†</sup>: 4,896 gr/lb

### **Softener Specifications:**

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 11 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.2 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency 9" Upflow Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



The Culligan High Efficiency 9" Upflow Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2044d. The Culligan High

Efficiency 9" Upflow Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20607.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.



<sup>&</sup>lt;sup>†</sup>The efficiency rated dosage is only valid at the 2 lb. salt dosage and maximum service flow rate

# Culligan High Efficiency 10" Upflow and 10" Upflow Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 10" Upflow Water Softener with Soft-Minder® Meter

### **Testing Conditions & Results:**

 Flow Rate:
 9.4 gpm @ 12 psi
 Capacity:
 15,314 grains @ 3.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 24,999 grains @ 6.0 lb. salt

 Acidity:
 Non-Corrosive
 37,674 grains @ 12.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 5,105 gr/lb

### **Softener Specifications:**

Service Flow Rate: 9.4 gpm Pressure Drop at Max. Flow Rate: 12 psi

Operating Temp. Range: 33–120°F (0–49°C)

Max. Drain Flow Rate: 2.3 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.4 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.4 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency 10" Upflow Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 10" Upflow Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2043c. The Culligan High Efficiency 10" Upflow Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20608.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 3 lb. salt dosage and maximum service flow rate for 10" models.



# Culligan High Efficiency 10" Upflow and 10" Upflow Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 10" Upflow Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

 Flow Rate:
 9.4 gpm @ 12 psi
 Capacity:
 15,314 grains @ 3.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 24,999 grains @ 6.0 lb. salt

 Acidity:
 Non-Corrosive
 37,674 grains @ 12.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 5,105 gr/lb

### **Softener Specifications:**

Service Flow Rate: 9.4 gpm Pressure Drop at Max. Flow Rate: 12 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.3 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.4 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.4 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency 10" Upflow Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated

by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 10" Upflow Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2043d. The Culligan High

Efficiency 10" Upflow Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20608.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 3 lb. salt dosage and maximum service flow rate for 10" models



US

### Culligan High Efficiency Municipal 9" and Municipal 9" Outdoor Water Softener

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Municipal 9" Water Softener

### **Testing Conditions & Results:**

Flow Rate: 9.0 gpm @ 11 psi Capacity: 17,119 grains @ 4.0 lb. salt Pressure: 30–40 psi (2.1–2.8 kg/cm2) 25,232 grains @ 8.0 lb. salt

Acidity: Non-Corrosive 27,806 grains @ 12.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6|

Efficiency Rated Dosage†: 4,280 gr/lb

Chlorine Taste and Odor Capacity: 300,000 gallons

### **Softener Specifications:**

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 11 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.6 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

### **Substance Reduction**

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

Substance	Influent Challenge Concentration	Reduction Requirement
Chlorine	2.0 mg/L ±10%	≥50%
Particulate, Class V particles 30 to <50 μm	At least 1,000 particles/mL	≥85%

The Culligan High Efficiency Municipal 9" Water Softener is tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI Standard 42 for the effective reduction of Chlorine Taste and Odor, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is valid only at the 4lb. salt dosage and 9.0 gpm flow rate for 9" models.



### Culligan High Efficiency Municipal 10" and Municipal 10" Outdoor Water Softener

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Municipal 10" Water Softener

### **Testing Conditions & Results:**

 Flow Rate:
 9.4 gpm @ 11 psi
 Capacity:
 21,399 grains @ 5.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 28,534 grains @ 10.0 lb. salt

 Acidity:
 Non-Corrosive
 34,758 grains @ 15.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,280 gr/lb

Chlorine Taste and Odor Capacity: 339,000 gallons

### **Softener Specifications:**

Service Flow Rate: 9.4 gpm

Pressure Drop at Max. Flow Rate: 11 psi

Max. Posit Flow Rate: 0.0 4000F (0.4000)

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.6 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

### **Substance Reduction**

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

Substance	Influent Challenge Concentration	Reduction Requirement
Chlorine	2.0 mg/L ±10%	≥50%
Particulate, Class V particles 30 to <50 μm	At least 1,000 particles/mL	≥85%

The Culligan High Efficiency Municipal 10" Water Softener is tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI Standard 42 for the effective reduction of Chlorine Taste and Odor, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

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.

Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is valid only at the 5 lb. salt dosage and 9.4 gpm flow rate for 10" models.



### Culligan High Efficiency Municipal 12" and Municipal 12" Outdoor Water Softener

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Municipal 12" Water Softener

**Testing Conditions & Results:** 

 Flow Rate:
 10.0 gpm @ 11 psi
 Capacity:
 29,062 grains @ 7.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 43,990 grains @ 18.0 lb. salt

 Acidity:
 Non-Corrosive
 49,343 grains @ 30.0 lb. salt

Temperature:  $68^{\circ}F$  (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,152 gr/lb

Chlorine Taste and Odor Capacity: 621,000 gallons

**Softener Specifications:** 

Service Flow Rate: 10.0 gpm Pressure Drop at Max. Flow Rate: 11 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 3.7 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

### **Substance Reduction**

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

Substance	Influent Challenge Concentration	Reduction Requirement
Chlorine	2.0 mg/L ±10%	≥50%
Particulate, Class V particles 30 to <50 μm	At least 1,000 particles/mL	≥85%

The Culligan High Efficiency Municipal 12" Water Softener is tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI Standard 42 for the effective reduction of Chlorine Taste and Odor, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is valid only at the 7 lb. salt dosage and 10.0 gpm flow rate for 12" models.



### Culligan High Efficiency Municipal 14" and Municipal 14" Outdoor Water Softener

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Municipal 14" Water Softener

### **Testing Conditions & Results:**

 Flow Rate:
 10.6 gpm @ 11 psi
 Capacity:
 42,943 grains @ 10.7 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 54,497 grains @ 18.0 lb. salt

 Acidity:
 Non-Corrosive
 66,230 grains @ 28.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,013 gr/lb

Chlorine Taste and Odor Capacity: 935,000 gallons

### **Softener Specifications:**

Service Flow Rate: 10.6 gpm Pressure Drop at Max. Flow Rate: 11 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 6.2 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

### **Substance Reduction**

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

Substance	Influent Challenge Concentration	Reduction Requirement
Chlorine	2.0 mg/L ±10%	≥50%
Particulate, Class V particles 30 to <50 μm	At least 1,000 particles/mL	≥85%

The Culligan High Efficiency Municipal 14" Water Softener is tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI Standard 42 for the effective reduction of Chlorine Taste and Odor, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

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.

Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is valid only at the 9 lb. salt dosage and 10.6 gpm flow rate for 14" models.





### Culligan High Efficiency 9" Softener-Cleer Water Conditioner

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: **Culligan International Company** 

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 9" Softener-Cleer Water Conditioner

The Culligan High Efficiency 9" Softener-Cleer Water Conditioners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372 for the low lead compliance, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective iron reduction up to 10ppm, as verified and substantiated by test data.



### Testing Conditions and Results

Flow Rate: 9.0 gpm @ 12 psi Capacity: 17,854 grains @ 4.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm<sup>2</sup>) 27,108 grains @ 8.0 lb. salt Acidity: Non-Corrosive 31,736 grains @ 12.0 lb. salt

Temperature: 68°F (20°C) pH:

Efficiency Rated Dosage†: 4,463 gr/lb

### Softener Specifications

NOTICE

Service Flow Rate: 9.0 gpm Max. Drain Flow Rate: 2.38 gpm Operating Temp. Range: 33-120°F (0-49°C) Pressure Drop at Max. Flow Rate: 12 psi

Working Press. Range: 20-125 psi (1.41-8.79 kg/cm2) Oper. Press. Range (Canada): 20-90 psi (1.41-6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

**Dissolved Iron Reduction Testing Conditions and Results:**The Culligan High Efficiency 9" Softener-Cleer Water Conditioner has been tested according to NSF/ANSI standard 42 for effective reduction of iron up to 2,000 gallons with influent dissolved iron level up to 10 ppm. 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 42.

Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Flow Rate
Iron	10 mg/L	0.3 mg/L	9.0 gpm

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan service technician to suggest the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 4 lb. salt dosage and maximum service flow rate for 9" models



### Culligan High Efficiency 10" Softener-Cleer Water Conditioner

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer:

**Culligan International Company** 

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 10" Softener-Cleer Water Conditioner

The Culligan High Efficiency 10" Softener-Cleer Water Conditioners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372 for the low lead compliance, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective iron reduction up to 10ppm, as verified and substantiated by test data.



Flow Rate: 9.4 gpm @ 13 psi Capacity: 26,781 grains @ 6.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm2) 40,662 grains @ 12.0 lb. salt Acidity: Non-Corrosive 47,604 grains @ 18.0 lb. salt

68°F (20°C) 7.6 Temperature: nH:

Efficiency Rated Dosage†: 4,463 gr/lb

### **Softener Specifications**

Max. Drain Flow Rate: 2.0 gpm Service Flow Rate: 9.4 gpm Operating Temp. Range: 33-120°F (0-49°C) Pressure Drop at Max. Flow Rate: 13 psi

Working Press. Range: 20-125 psi (1.41-8.79 kg/cm2) Oper. Press. Range (Canada): 20-90 psi (1.41-6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.4 gpm	13 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.4 gpm	13 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

### **Dissolved Iron Reduction Testing Conditions and Results:**

The Culligan High Efficiency 10" Softener-Cleer Water Conditioner has been tested according to NSF/ANSI standard 42 for effective reduction of iron up to 3,000 gallons with influent dissolved iron level up to 10 ppm. 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 42.

	Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Flow Rate
١	Iron	10 mg/L	0.3 mg/L	9.4 gpm

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan service technician to suggest the best type and grade of salt to use in this softener.

**NOTICE** This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 6 lb. salt dosage and maximum service flow rate for 10" models.



### Culligan High Efficiency 12" Softener-Cleer Water Conditioner

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: **Culligan International Company** 

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 12" Softener-Cleer Water Conditioner

The Culligan High Efficiency 12" Softener-Cleer Water Conditioners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372 for the low lead compliance, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective iron reduction up to 10ppm, as verified and substantiated by test data.



### **Testing Conditions and Results**

10.0 gpm @ 11 psi 30-40 psi (2.1-2.8 kg/cm2) Flow Rate: Capacity: 31,352 grains @ 7.0 lb. salt Pressure: 48,458 grains @ 16.0 lb. salt Acidity: Non-Corrosive 59,267 grains @ 24.0 lb. salt pH:

Temperature: 68°F (20°C) Efficiency Rated Dosage†: 4,479 gr/lb

### Softener Specifications

NOTICE

Service Flow Rate: 10.0 gpm Max. Drain Flow Rate: 3.5 gpm Operating Temp. Range: 33-120°F (0-49°C) Pressure Drop at Max. Flow Rate: 11 psi

Working Press. Range: 20-125 psi (1.41-8.79 kg/cm2) Oper. Press. Range (Canada): 20-90 psi (1.41-6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.0 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.0 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

### **Dissolved Iron Reduction Testing Conditions and Results:**

The Culligan High Efficiency 12" Softener-Cleer Water Conditioner has been tested according to NSF/ANSI standard 42 for effective reduction of iron up to 4,000 gallons with influent dissolved iron level up to 10 ppm. 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 42.

Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Flow Rate
Iron	10 mg/L	0.3 mg/L	10.0 gpm

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan service technician to suggest the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 7 lb. salt dosage and maximum service flow rate for 12" models.



### Culligan High Efficiency 14" Softener-Cleer Water Conditioner

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: **Culligan International Company** 

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 14" Softener-Cleer Water Conditioner

The Culligan High Efficiency 14" Softener-Cleer Water Conditioners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372 for the low lead compliance, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective iron reduction up to 10ppm, as verified and substantiated by test data.



Testing Conditions and Results

10.6 gpm @ 11 psi 30–40 psi (2.1–2.8 kg/cm2) Capacity: 42,548 grains @ 10.5 lb. salt 67,146 grains @ 24.0 lb. salt Flow Rate: Pressure: 87,987 grains @ 36.0 lb. salt Non-Corrosive Acidity:

Temperature: 68°F (20°C) pH:

Efficiency Rated Dosage†: 4,052 gr/lb @ 10.5 lb. salt

Softener Specifications

Service Flow Rate: 10.6 gpm Max. Drain Flow Rate: 5.3 gpm

Operating Temp. Range: 33-120°F (0-49°C) Pressure Drop at Max. Flow Rate: 11 psi

Working Press. Range: 20-125 psi (1.41-8.79 kg/cm2) Oper. Press. Range (Canada): 20-90 psi (1.41-6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	pН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.6 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.6 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

### **Dissolved Iron Reduction Testing Conditions and Results:**

The Culligan High Efficiency 14" Softener-Cleer Water Conditioner has been tested according to NSF/ANSI standard 42 for effective reduction of iron up to 6,000 gallons with influent dissolved iron level up to 10 ppm. 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 42.

ĺ	Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Flow Rate
ĺ	Iron	10 mg/L	0.3 mg/L	10.6 apm

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan service technician to suggest the best type and grade of salt to use in this softener.

**NOTICE** This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 12 lb. salt dosage and maximum service flow rate for 14" models.



### Culligan High Efficiency 9" Softener-Cleer Plus and 9" Softener-Cleer Plus Outdoor Water Conditioner

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: **Culligan International Company** 

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 9" Softener-Cleer Plus Water Conditioner

The Culligan High Efficiency 9" Softener-Cleer Plus Water Conditioners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372 for the low lead compliance, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective iron reduction up to 10ppm, as verified and substantiated by test data.

Testing Conditions and Results

Capacity: 17,854 grains @ 4.0 lb. salt 27,108 grains @ 8.0 lb. salt 8.0 gpm @ 9.5 psi 30–40 psi (2.1–2.8 kg/cm2) Flow Rate: Pressure: Acidity: 31,736 grains @ 12.0 lb. salt

Non-Corrosive 68°F (20°C) Temperature: pH:

Efficiency Rated Dosage†: 4,463 gr/lb



Service Flow Rate: 8.0 gpm Max. Drain Flow Rate: 2.34 gpm Operating Temp. Range: 33-120°F (0-49°C) Pressure Drop at Max. Flow Rate: 9.5 psi

Working Press. Range: 20-125 psi (1.41-8.79 kg/cm2) Oper. Press. Range (Canada): 20-90 psi (1.41-6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	8.0 gpm	9.5 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	8.0 gpm	9.5 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

**Dissolved Iron Reduction Testing Conditions and Results:**The Culligan High Efficiency 9" Softener-Cleer Plus Water Conditioner has been tested according to NSF/ANSI standard 42 for effective reduction of iron up to 2,000 gallons with influent dissolved iron level up to 10 ppm. The claim is only valid for flow rate restricted to 4gpm. 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 42.

Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Flow Rate
Iron	10 mg/L	0.3 mg/L	4.0 gpm

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan service technician to suggest the best type and grade of salt to use in this softener.

NOTICE This conditioner is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 4 lb. salt dosage and maximum service flow rate for 9" models.



### Culligan High Efficiency 10" Softener-Cleer Plus Water Conditioner

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer:

Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800

Product: Culligan High Efficiency 10" Softener-Cleer Plus Water Conditioner

The Culligan High Efficiency 10" Softener-Cleer Plus Water Conditioners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372 for the low lead compliance, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective iron reduction up to 10ppm, as verified and substantiated by test data.



Testing Conditions and Results

Flow Rate: 9.9 gpm @ 14 psi

Capacity: 26,781 grains @ 6.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm2) 40,662 grains @ 12.0 lb. salt Acidity: Non-Corrosive 47,604 grains @ 18.0 lb. salt

68°F (20°C) Temperature: pH:

Efficiency Rated Dosage†: 4,463 gr/lb

### **Softener Specifications**

Service Flow Rate: 9.9 gpm Max. Drain Flow Rate: 2.5 gpm

Operating Temp. Range: 33-120°F (0-49°C) Pressure Drop at Max. Flow Rate: 14 psi

Working Press. Range: 20-125 psi (1.41-8.79 kg/cm2) Oper. Press. Range (Canada): 20-90 psi (1.41-6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.9 gpm	14 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.9 gpm	14 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

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. Efficiency rated water softeners shall have

A rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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

**Dissolved Iron Reduction Testing Conditions and Results:**The Culligan High Efficiency 10" Softener-Cleer Plus Water Conditioner has been tested according to NSF/ANSI standard 42 for effective reduction of iron up to 3,000 gallons with influent dissolved iron level up to 10 ppm. The claim is only valid for flow rate restricted to 5.9 gpm. 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 42.

Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Flow Rate
Iron	10 mg/l	0.3 mg/l	5.9 apm

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan service technician to suggest the best type and grade of salt to use in this softener.

This conditioner is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 6 lb. salt dosage and maximum service flow rate for 10" models.



### Culligan High Efficiency 12" Softener-Cleer Plus Water Conditioner

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

> 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.

**Culligan International Company** 9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 12" Softener-Cleer Plus Water Conditioner

The Culligan High Efficiency 12" Softener-Cleer Plus Water Conditioners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372 for the low lead compliance, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective iron reduction up to 10ppm, as verified and substantiated by test data.



8.5 gpm @ 9 psi Capacity: 31,200 grains @ 7.0 lb. salt 30-40 psi (2.1-2.8 kg/cm2) Pressure: 44,764 grains @ 16.0 lb. salt Acidity: Non-Corrosive 63,472 grains @ 24.0 lb. salt

Temperature: 68°F (20°C)

Efficiency Rated Dosage†: 4,457 gr/lb

### **Softener Specifications**

**NOTICE** 

Manufacturer:

Service Flow Rate: 8.5 gpm Max. Drain Flow Rate: 3.5 gpm Operating Temp. Range: 33-120°F (0-49°C) Pressure Drop at Max. Flow Rate: 9 psi

Working Press. Range: 20-125 psi (1.41-8.79 kg/cm2) Oper. Press. Range (Canada): 20-90 psi (1.41-6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	8.5 gpm	9 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	8.5 gpm	9 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

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. Efficiency rated water softeners shall have

A rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Dissolved Iron Reduction Testing Conditions and Results:
The Culligan High Efficiency 12" Softener-Cleer Plus Water Conditioner has been tested according to NSF/ANSI standard 42 for effective reduction of iron up to 4,000 gallons with influent dissolved iron level up to 10 ppm. The claim is only valid for flow rate restricted to 8.5 gpm. 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 42.

ı	Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Flow Rate
ı	Iron	10 mg/L	0.3 mg/L	8.5 gpm

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan service technician to suggest the best type and grade of salt to use in this softener.

NOTICE This conditioner is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 7 lb. salt dosage and maximum service flow rate for 12" models.



### Culligan High Efficiency 14" Softener-Cleer Plus Water Conditioner

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

**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.

**Culligan International Company** Manufacturer:

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 14" Softener-Cleer Plus Water Conditioner

The Culligan High Efficiency 14" Softener-Cleer Plus Water Conditioners are tested and certified by WQA against CSA B483.1, NSF/ANSI/CAN Standard 61, NSF/ANSI Standard 372 for the low lead compliance, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), and NSF/ANSI 42 for the effective iron reduction up to 10ppm, as verified and substantiated by test data.



11.0 gpm @ 15 psi 30–40 psi (2.1–2.8 kg/cm2) Capacity: 42,548 grains @ 10.5 lb. salt Flow Rate: 67,146 grains @ 24.0 lb. salt Pressure:

Acidity: Non-Corrosive 87,987 grains @ 36.0 lb. salt

Temperature: 68°F (20°C)

Efficiency Rated Dosage†: 4,052 gr/lb @ 10.5 lb. salt

### Softener Specifications

Service Flow Rate: 11.0 gpm Max. Drain Flow Rate: 5.3 gpm

Operating Temp. Range: 33-120°F (0–49°C) Working Press. Range: 20-125 psi (1.41–8.79 kg/cm2) Pressure Drop at Max. Flow Rate: 15 psi

Oper. Press. Range (Canada): 20-90 psi (1.41-6.33 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	11.0 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	11.0 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

An efficiency rated water softener is a DIR softener which also complies with specific performance specifications intended to minimize the amount of regenerated brine and water used in its operation. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

### Dissolved Iron Reduction Testing Conditions and Results:

Culligan High Efficiency 14" Softener-Cleer Plus Water Conditioner has been tested according to NSF/ANSI standard 42 for effective reduction of iron up to 6,000 gallons with influent dissolved iron level up to 10 ppm. The claim is only valid for flow rate restricted to 11.6 gpm. 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 42.

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	Substance	Influent Challenge Concentration	Max Permissible Product Water Concentration	Flow Rate
Г	Iron	10 mg/L	0.3 mg/L	11.6 apm

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan service technician to suggest the best type and grade of salt to use in this softener.

NOTICE This conditioner is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

†The efficiency rated dosage is only valid at the 12 lb. salt dosage and maximum service flow rate for 14" models.



### Culligan High Efficiency Twin 9" and Twin 9" Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 9" Downflow Water Softener with Soft-Minder® Meter

**Testing Conditions & Results:** 

NOTICE

Flow Rate: 9.0 gpm @ 15 psi Capacity: 17,854 grains @ 4.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm<sup>2</sup>) 27,108 grains @ 8.0 lb. salt Acidity: Non-Corrosive 31,736 grains @ 12.0 lb. salt

Temperature: 68°F (20°C)

Efficiency Rated Dosage<sup>†</sup>: 4,463 gr/lb

Softener Specifications:

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 15 psi Operating Temp. Range: 33-120°F (0.6-51.7°C) Max. Drain Flow Rate: 1.98 gpm

Working Press. Range: 20-125 psi (1.4-8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	15 (psia)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin Series 9" Downflow Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin Series 9" Downflow Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2072b. The Culligan High Efficiency Twin Series 9" Downflow Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20614.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 4lb. salt dosage and maximum service flow rate for 9" models.



### Culligan High Efficiency Twin 9" and Twin 9" Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Read this Performance Data Sheet and compare the capabilities of this unit with your actual water

Manufacturer: Culligan International Company 9399 W. Higgins Rd., Suite 1100,

www.culligan.com

Rosemont, IL 60018 USA (847) 430-2800

Product: Culligan High Efficiency Twin 9" Downflow Water Softener with Aqua-Sensor® Sensing Device

**Testing Conditions & Results:** 

Flow Rate: 9.0 gpm @ 15 psi Capacity: 17,854 grains @ 4.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm<sup>2</sup>) 27,108 grains @ 8.0 lb. salt Acidity: Non-Corrosive 31,736 grains @ 12.0 lb. salt

68°F (20°C) Temperature: pH:

Efficiency Rated Dosage†: 4,463 grains @ 4.0 lb salt

**Softener Specifications:** 

NOTICE

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 15 psi Operating Temp. Range: 33-120°F (0.6-51.7°C) Max. Drain Flow Rate: 1.98 gpm

Working Press. Range: 20-125 psi (1.4-8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	15 (psia)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 9" Downflow Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin 9" Downflow Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2072a. The Culligan High Efficiency Twin 9" Downflow Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20614.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 4lb. salt dosage and maximum service flow rate for 9" models.



# Culligan High Efficiency Twin 10" and Twin 10" Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Culligan International Company 9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 10" Downflow Water Softener with Soft-Minder® Meter

### **Testing Conditions & Results:**

 Flow Rate:
 9.4 gpm @ 12 psi
 Capacity:
 26,781 grains @ 6.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 40,662 grains @ 12.0 lb. salt

 Acidity:
 Non-Corrosive
 47,604 grains @ 18.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,463 gr/lb **Softener Specifications:** 

NOTICE

Manufacturer:

Service Flow Rate: 9.4 gpm Pressure Drop at Max. Flow Rate: 12 psi

Operating Temp. Range: 33-120°F (0.6–51.7°C) Max. Drain Flow Rate: 2.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.4 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.4 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 10" Downflow Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin 10" Downflow Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2075b. The Culligan High Efficiency Twin 10" Downflow Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20615.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 6 lb. salt dosage and maximum service flow rate for 10" models.



### Culligan High Efficiency Twin 10" and Twin 10" Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 10" Downflow Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

NOTICE

Flow Rate: 9.4 gpm @ 12 psi Capacity: 26,781 grains @ 6.0 lb. salt 30-40 psi (2.1-2.8 kg/cm2) Pressure: 40,662 grains @ 12.0 lb. salt Acidity: Non-Corrosive 47,604 grains @ 18.0 lb. salt

Temperature: 68°F (20°C) 76 pH:

Efficiency Rated Dosage<sup>†</sup>: 4,463 gr/lb

### **Softener Specifications:**

Service Flow Rate: 9.4 gpm Pressure Drop at Max. Flow Rate: 12 psi

Operating Temp. Range: 33-120°F (0.6-51.7°C) Max. Drain Flow Rate: 2.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.4 gpm	12 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.4 gpm	12 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 10" Downflow Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin 10" Downflow Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2075a. The Culligan High Efficiency Twin 10" Downflow Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20615.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 6lb. salt dosage and maximum service flow rate for 10" models.



### Culligan High Efficiency Twin 12" and Twin 12" Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

> 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.

Culligan International Company 9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 12" Water Softener with Soft-Minder® Meter

### Testing Conditions & Results:

Flow Rate: 10.0 gpm @ 10 psi Capacity: 31,352 grains @ 7.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm2) 48,458 grains @ 16.0 lb. salt Acidity: Non-Corrosive 59,267 grains @ 24.0 lb. salt

Temperature: 68°F (20°C)

Efficiency Rated Dosage<sup>†</sup>: 4,479 gr/lb

**Softener Specifications:** 

NOTICE

Manufacturer:

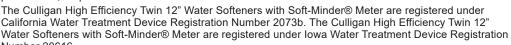
Service Flow Rate: 10.0 gpm Pressure Drop at Max. Flow Rate: 10 psi (71 kPa)

Operating Temp. Range: 33-120°F (0.6-51.7°C) Max. Drain Flow Rate: 2.86 gpm

Working Press. Range: 20-125 psi (1.4-8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.0 gpm	10 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.0 gpm	10 (psig)

The Culligan High Efficiency Twin 12" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 7 lb. salt dosage and maximum service flow rate for 12" models.





### Culligan High Efficiency Twin 12" and Twin 12" Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Read this Performance Data Sheet and compare the capabilities of this unit with your actual water

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 12" Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

Flow Rate: 10.0 gpm @ 10 psi Capacity: 31,352 grains @ 7.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm2) 48,458 grains @ 16.0 lb. salt Acidity: Non-Corrosive 59,267 grains @ 24.0 lb. salt

Temperature: 68°F (20°C) pH:

Efficiency Rated Dosage<sup>†</sup>: 4,479 gr/lb **Softener Specifications:** 

NOTICE

Service Flow Rate: 10.0 gpm Pressure Drop at Max. Flow Rate: 10 psi (71 kPa)

Operating Temp. Range: 33-120°F (0.6-51.7°C) Max. Drain Flow Rate: 2.86 gpm

Working Press. Range: 20-125 psi (1.4-8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.0 gpm	10 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.0 gpm	10 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 12" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin 12" Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2073a. The Culligan High Efficiency Twin 12" Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20616.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 7 lb. salt dosage and maximum service flow rate for 12" models.





# Culligan High Efficiency Twin 14" and Twin 14" Outdoor Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

Culligan International Company 9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 14" Water Softener with Soft-Minder® Meter

### **Testing Conditions & Results:**

 Flow Rate:
 10.6 gpm @ 11 psi
 Capacity:
 42,548 grains @ 10.5 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 75,582 grains @ 24.0 lb. salt

 Acidity:
 Non-Corrosive
 88,549 grains @ 36.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,052 grains @ 10.5 lb. salt

### **Softener Specifications:**

NOTICE

Service Flow Rate: 10.6 gpm Pressure Drop at Max. Flow Rate: 11 psi

Operating Temp. Range: 33-120°F (0.6–51.7°C) Max. Drain Flow Rate: 5.3 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.6 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.6 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 14" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin 14" Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2074b. The Culligan High Efficiency Twin 14" Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20617.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 12 lb. salt dosage and maximum service flow rate for 14" models.





# Culligan High Efficiency Twin 14" and Twin 14" Outdoor Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Culligan International Company 9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 14" Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

 Flow Rate:
 10.6 gpm @ 11 psi
 Capacity:
 42,548 grains @ 10.5 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 75,582 grains @ 24.0 lb. salt

 Acidity:
 Non-Corrosive
 88,549 grains @ 36.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,052 grains @ 10.5 lb. salt

### **Softener Specifications:**

NOTICE

Manufacturer:

Service Flow Rate: 10.6 gpm Pressure Drop at Max. Flow Rate: 11 psi

Operating Temp. Range: 33-120°F (0.6–51.7°C) Max. Drain Flow Rate: 5.3 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	10.6 gpm	11 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	10.6 gpm	11 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 14" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



The Culligan High Efficiency Twin 14" Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2074a. The Culligan High Efficiency Twin 14" Water Softeners with Aqua-Sensor® Sensing Device are registered under lowa Water Treatment Device Registration Number 20617.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 12lb. salt dosage and maximum service flow rate for 14" models.



# Culligan High Efficiency Twin Upflow 9" Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Culligan International Company 9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 9" Upflow Water Softener with Soft-Minder® Meter

### **Testing Conditions & Results:**

 Flow Rate:
 9.0 gpm @ 15 psi
 Capacity:
 9,792 grains @ 2.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 17,366 grains @ 4.0 lb. salt

 Acidity:
 Non-Corrosive
 27,306 grains @ 8.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,896 gr/lb @ 2.0 lb salt dosage

### **Softener Specifications:**

NOTICE

Manufacturer:

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 15 psi

Operating Temp. Range: 33-120°F (0.6–51.7°C) Max. Drain Flow Rate: 2.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	15 (psia)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin Series 9" Upflow Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin Series 9" Upflow Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2072h. The Culligan High Efficiency Twin Series 9" Upflow

Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20614.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 2lb. salt dosage and maximum service flow rate for 9" models.



# Culligan High Efficiency Twin Upflow 9" Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Culligan International Company 9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 9" Upflow Water Softener with Aqua-Sensor® Sensing Device

**Testing Conditions & Results:** 

 Flow Rate:
 9.0 gpm @ 15 psi
 Capacity:
 9,792 grains @ 2.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 17,366 grains @ 4.0 lb. salt

 Acidity:
 Non-Corrosive
 27,306 grains @ 8.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 4,896 grains @ 2.0 lb salt dosage

**Softener Specifications:** 

NOTICE

Manufacturer:

Service Flow Rate: 9.0 gpm Pressure Drop at Max. Flow Rate: 15 psi

Operating Temp. Range: 33-120°F (0.6–51.7°C) Max. Drain Flow Rate: 2.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.0 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.0 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 9" Upflow Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin 9" Upflow Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2072g. The Culligan High Efficiency Twin 9" Upflow Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20614.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 2lb. salt dosage and maximum service flow rate for 9" models.



# Culligan High Efficiency Twin Upflow 10" Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Culligan International Company 9399 W. Higgins Rd., Suite 1100,

Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 10" Upflow Water Softener with Soft-Minder® Meter

### **Testing Conditions & Results:**

 Flow Rate:
 9.1 gpm @ 15 psi
 Capacity:
 15,314 grains @ 3.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 47,726 grains @ 12.0 lb. salt

 Acidity:
 Non-Corrosive
 54,975 grains @ 18.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage<sup>†</sup>: 5,105 gr/lb @ 3 lb. salt dosage

### **Softener Specifications:**

NOTICE

Manufacturer:

Service Flow Rate: 9.1 gpm Pressure Drop at Max. Flow Rate: 15 psi

Operating Temp. Range: 33-120°F (0.6–51.7°C) Max. Drain Flow Rate: 2.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.1 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.1 gpm	15 (psia)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 10" Upflow Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin 10" Upflow Water Softeners with Soft-Minder® Meter are registered under California Water Treatment Device Registration Number 2075e. The Culligan High Efficiency Twin 10" Upflow Water Softeners with Soft-Minder® Meter are registered under lowa Water Treatment Device Registration Number 20615.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

<sup>†</sup>The efficiency rated dosage is only valid at the 6 lb. salt dosage and maximum service flow rate for 10" models.



### Culligan High Efficiency Twin Upflow 10" Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Culligan International Company Manufacturer:

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency Twin 10" Upflow Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

Flow Rate: 9.1 gpm @ 15 psi Capacity: 15,314 grains @ 3.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm2) 47,726 grains @ 12.0 lb. salt Acidity: Non-Corrosive 54,975 grains @ 18.0 lb. salt

68°F (20°C) Temperature:

Efficiency Rated Dosage<sup>†</sup>: 5,105 gr/lb @ 3 lb. salt dosage

### **Softener Specifications:**

NOTICE

Service Flow Rate: 9.4 gpm Pressure Drop at Max. Flow Rate: 15 psi

Operating Temp. Range: 33-120°F (0.6–51.7°C) Max. Drain Flow Rate: 2.0 gpm

Working Press. Range: 20-125 psi (1.4-8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	9.1 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	9.1 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every 6 months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced.

The Culligan High Efficiency Twin 10" Upflow Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228, as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency Twin 10" Upflow Water Softeners with Aqua-Sensor® Sensing Device are registered under California Water Treatment Device Registration Number 2075h. The Culligan High Efficiency Twin 10"

Upflow Water Softeners with Aqua-Sensor® Sensing Device are registered under lowa Water Treatment Device Registration Number 20615.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan Man. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan Man for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.





<sup>&</sup>lt;sup>†</sup>The efficiency rated dosage is only valid at the 6lb. salt dosage and maximum service flow rate for 10" models.

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### Culligan High Efficiency 1.25 10" Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 1.25 10" Water Softener with Soft-Minder® Meter

**Testing Conditions & Results:** 

 Flow Rate:
 14.9 gpm @ 15 psi
 Capacity:
 28,109 grains @ 6.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 41,587 grains @ 12.0 lb. salt

 Acidity:
 Non-Corrosive
 45,831 grains @ 18.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,685 gr @ 6.0 lb

**Softener Specifications:** 

Service Flow Rate: 14.9 gpm Pressure Drop at Max. Flow Rate: 15 psi

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm2) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm2)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	14.9 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	14.9 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan High Efficiency 1.25 Series 10" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

unsafe or of unknown quality without adequate disinfection before	re or after the system.		
†The efficiency rated dosage is only valid at the 6 lb. salt dosage and maximum service flow rate for 10" models.			
Buyer Signature	Date		
Seller Signature	Date		

This softener is not intended to be used for treating water that is microbiologically



NOTICE

### Culligan High Efficiency 1.25 10" Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Culligan High Efficiency 1.25 10" Water Softener with Aqua-Sensor® Sensing Device Product:

**Testing Conditions & Results:** 

Flow Rate: 14.9 gpm @ 15 psi Capacity: 28,109 grains @ 6.0 lb. salt Pressure: 30-40 psi (2.1-2.8 kg/cm2) 41,587 grains @ 12.0 lb. salt Acidity: Non-Corrosive 45,831 grains @ 18.0 lb. salt 76

Temperature: 68°F (20°C) pH:

Efficiency Rated Dosaget: 4,685 gr @ 6.0 lb

**Softener Specifications:** 

Service Flow Rate: 14.9 gpm Pressure Drop at Max. Flow Rate: 15 psi Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 2.0 gpm

Working Press. Range: 20-125 psi (1.4-8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	14.9 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	14.9 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan High Efficiency 1.25 Series 10" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 1.25 Series 10" Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20662.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.			
†The efficiency rated dosage is only valid at the 6 lb. salt dosage and maximum service flow rate for 10" models.			
Buyer Signature	9	Date	
Seller Signature		Date	



NOTICE

### Culligan High Efficiency 1.25 12" Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 1.25 12" Water Softener with Soft-Minder® Meter

**Testing Conditions & Results:** 

Flow Rate: 17.9 gpm @ 15 psi Capacity: 35,247 grains @ 8.0 lb. salt Pressure: 30–40 psi (2.1–2.8 kg/cm2) 54,191 grains @ 16.0 lb. salt Acidity: Non-Corrosive 64,053 grains @ 24.0 lb. salt

Temperature:  $68^{\circ}F(20^{\circ}C)$  pH: 7.6

Efficiency Rated Dosage†: 4,406 gr @ 8 lb.

Softener Specifications:

Service Flow Rate: 17.9 gpm Pressure Drop at Max. Flow Rate: 15 psi Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 3.5 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	17.9 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	17.9 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan High Efficiency 1.25 Series 12" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis



The Culligan High Efficiency 1.25 Series 12" Water Softeners are registered under California Water Treatment Device Registration Number 3058. The Culligan High Efficiency 1.25 Series 12" Water Softeners with Soft-Minder<sup>®</sup> Meter are registered under lowa Water Treatment Device Registration Number 20663.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

unsafe or of unknown quality without adequate disinfection before or after the system.				
<sup>†</sup> The efficiency rated dosage is only valid at the 8 lb. salt dosage and maximum service flow rate for 12" models.				
Buyer Signature		Date		
Seller Signature		Date		

This softener is not intended to be used for treating water that is microbiologically



NOTICE

### Culligan High Efficiency 1.25 12" Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 1.25 12" Water Softener with Aqua-Sensor® Sensing Device

**Testing Conditions & Results:** 

 Flow Rate:
 17.9 gpm @ 15 psi
 Capacity: 35,247 grains @ 8.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 54,191 grains @ 16.0 lb. salt

 Acidity:
 Non-Corrosive
 64,053 grains @ 24.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,406 gr @ 8 lb.

**Softener Specifications:** 

Service Flow Rate: 17.9 gpm Pressure Drop at Max. Flow Rate: 15 psi Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 3.5 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	17.9 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	17.9 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan High Efficiency 1.25 Series 12" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



The Culligan High Efficiency 1.25 Series 12" Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20663.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE	NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.		
†The efficiency rated dosage is only valid at the 8 lb. salt dosage and maximum service flow rate for 12" models.			
Buyer Signature	9	Date	
Seller Signature		Date	



### Culligan High Efficiency 1.25 14" Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 1.25 14" Water Softener with Soft-Minder® Meter

**Testing Conditions & Results:** 

Flow Rate: 19.3 gpm @ 15 psi Capacity: 56,218 grains @ 12.0 lb. salt Pressure: 30–40 psi (2.1–2.8 kg/cm2) 83,174 grains @ 24.0 lb. salt Acidity: Non-Corrosive 91,662 grains @ 36.0 lb. salt Temperature: 68°F (20°C) pH: 7.6

Temperature: 68°F (20°C) Efficiency Rated Dosage†: 4,685 gr/lb

**Softener Specifications:** 

Service Flow Rate: 19.3 gpm Pressure Drop at Max. Flow Rate: 15 psi (71 kPa)
Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 4.5 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm<sup>2</sup>) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm<sup>2</sup>)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	19.3 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	19.3 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan High Efficiency 1.25 Series 14" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



The Culligan High Efficiency 1.25 Series 14" Water Softeners are registered under California Water Treatment Device Registration Number 3059. The Culligan High Efficiency 1.25 Series 14" Water Softeners with Soft-Minder® Meter are registered under Iowa Water Treatment Device Registration Number 20664.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water. Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE	unsafe or of unknown quality without adequate disinfection be	0 ,		
The efficiency rated dosage is only valid at the 12 lb. salt dosage and maximum service flow rate for 14" models.				
Buyer Signature	9	Date		
Seller Signature		Date		



### Culligan High Efficiency 1.25 14" Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 1.25 14" Water Softener with Aqua-Sensor® Sensing Device

**Testing Conditions & Results:** 

 Flow Rate:
 19.3 gpm @ 15 psi
 Capacity:
 56,218 grains @ 12.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 83,174 grains @ 24.0 lb. salt

 Acidity:
 Non-Corrosive
 91,662 grains @ 36.0 lb. salt

 Temperature:
 68°F (20°C)
 pH:
 7.6

Efficiency Rated Dosage†: 4,685 gr/lb

**Softener Specifications:** 

Service Flow Rate: 19.3 gpm Pressure Drop at Max. Flow Rate: 10 psi (71 kPa)

Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 4.5 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	19.3 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	19.3 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan High Efficiency 1.25 Series 14" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.

The Culligan High Efficiency 1.25 Series 14" Water Softeners with Aqua-Sensor® Sensing Device are registered under Iowa Water Treatment Device Registration Number 20664.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.				
†The efficiency rated dosage is only valid at the 12 lb. salt dosage and maximum service flow rate for 14" models.				
Buyer Signature Date				
Seller Signatu	re	Date		



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### Culligan High Efficiency 1.25 16" Water Softener with Soft-Minder® Meter

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 1.25 16" Water Softener with Soft-Minder® Meter

**Testing Conditions & Results:** 

Flow Rate: 21.0 gpm @ 15 psi Capacity: 70,494 grains @ 16.0 lb. salt Pressure: 30–40 psi (2.1–2.8 kg/cm2) 108,382 grains @ 32.0 lb. salt 108,382 grains @ 32.0 lb. salt 128,106 grains @ 48.0 lb. salt 128,106 grains @ 48.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage†: 4,406 gr @ 16.0 lb

**Softener Specifications:** 

Service Flow Rate: 21.0 gpm Pressure Drop at Max. Flow Rate: 15 psi Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 6.0 gpm

Working Press. Range: 20-125 psi (1.4-8.5 kg/cm²) Oper. Press. Range (Canada): 20-90 psi (1.4-6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	21.0 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	21.0 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan High Efficiency 1.25 Series 16" Water Softeners with Soft-Minder® Meter are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



The Culligan High Efficiency 1.25 Series 16" Water Softeners are registered under California Water Treatment Device Registration Number 3060. The Culligan High Efficiency 1.25 Series 16" Water Softeners with Soft-Minder® Meter are registered under lowa Water Treatment Device Registration Number 20665.

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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water.

Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.				
†The efficiency rated dosage is only valid at the 16 lb. salt dosage and maximum service flow rate for 16" models.				
Buyer Signature Date				
Seller Signature		Date		



### Culligan High Efficiency 1.25 16" Water Softener with Aqua-Sensor® Sensing Device

Culligan knows the more informed you are about your water treatment systems, the more confident you will be about its performance. It's because of this and more than seventy years of commitment to customer satisfaction that Culligan is providing this Performance Data Sheet to its customers.

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.

Manufacturer: Culligan International Company

9399 W. Higgins Rd., Suite 1100, Rosemont, IL 60018 USA

(847) 430-2800 www.culligan.com

Product: Culligan High Efficiency 1.25 16" Water Softener with Aqua-Sensor® Sensing Device

### **Testing Conditions & Results:**

 Flow Rate:
 21.0 gpm @ 15 psi
 Capacity:
 70,494 grains @ 16.0 lb. salt

 Pressure:
 30–40 psi (2.1–2.8 kg/cm2)
 108,382 grains @ 32.0 lb. salt

 Acidity:
 Non-Corrosive
 128,106 grains @ 48.0 lb. salt

Temperature: 68°F (20°C) pH: 7.6

Efficiency Rated Dosage †: 4,406 gr @ 16.0 lb

### **Softener Specifications:**

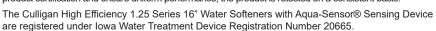
Service Flow Rate: 21.0 gpm Pressure Drop at Max. Flow Rate: 15 psi Operating Temp. Range: 33–120°F (0–49°C) Max. Drain Flow Rate: 6.0 gpm

Working Press. Range: 20–125 psi (1.4–8.5 kg/cm²) Oper. Press. Range (Canada): 20–90 psi (1.4–6.3 kg/cm²)

Name of Substance	USEPA Max. Contaminant Level	рН	Flow Rate	Pressure
Barium	2.0 mg/L	7.5 + 0.5	21.0 gpm	15 (psig)
Radium 226/228	5 pCi/L	7.5 + 0.5	21.0 gpm	15 (psig)

This system is certified for barium and radium 226/228 reduction based on hardness reduction. It is recommended you test your water every six months to ensure the system is performing properly and that hardness, and therefore barium and radium 226/228, are being reduced. Hardness test strips have been included. Additional strips are available from your local Culligan dealer.

The Culligan High Efficiency 1.25 Series 16" Water Softeners with Aqua-Sensor® Sensing Device are tested and certified by WQA against NSF/ANSI Standard 372, CSA B483.1, and NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium), barium, and radium 226/228 as verified and substantiated by test data. To maintain product certification and ensure uniform performance, the product is retested on a consistent basis.



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. Efficiency rated water softeners shall have a rated salt efficiency of not less than 3350 grains of total hardness exchange per pound of salt (based on NaCl equivalency) (477 grams of total hardness exchange per kilogram of salt), and shall not deliver more salt than its listed rating. The efficiency is measured by a laboratory test described in NSF/ANSI 44. The test represents the maximum possible efficiency 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.

Refer to the Specifications, Familiarization and Warranty section of this Owner's Guide (P/N 01040764) for more specific product information. To avoid contamination from improper handling and installation, your system should only be installed and serviced by your Culligan dealer. Performance will vary based on local water conditions. The substances reduced by this system are not necessarily in your water. Culligan water softeners are designed to work with any salt of good quality, although it is recommended that you ask your local Culligan dealer for his suggestion on the best type and grade of salt to use in this softener.

NOTICE This softener is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.				
†The efficiency rated dosage is only valid at the 16 lb. salt dosage and maximum service flow rate for 16" models.				
Buyer Signature _		Date		
Seller Signature		Date		



### **Records & Data**

### Important Information about your Culligan Water Softening System

Please fill in the information below for future reference. If you have any questions regarding your Culligan water system, please contact the dealer that installed your system for assistance.

Addition information may also be found by visiting: www.culligan.com

System and Dealer Identification

Model Name:  Control Valve Serial #  Tank Serial #  City/Town:
Tank Serial #
City/Town:
State:
Recommended Culligan Service Interval:
Annual: Bi-Annual:
Owner Maintenance:
Check Salt Level
Replace Cartridge Filter(s)
Add Resin Cleaner
TotalDissolvedSolids-TDSmg/l
Alkalinitygrains/gallon
Manganesemg/l
Hydrogen Sulfide (H <sub>2</sub> S)mg/l

NOTE! mg/l (milligrams per liter) and ppm (parts per million) are equivalent units of measurement 1 grain = 17.1 mg/l



### **Culligan Limited Warranty**

### **Culligan High Efficiency Water Conditioners**

You have just purchased one of the finest water conditioners made. As an expression of our confidence in Culligan International Company products, your water conditioner is warranted to the original end-user, when installed in accordance with Culligan specifications, against defects in material and workmanship from the date of original installation, as follows:

For the LIFETIME of the original consumer purchaser	The Quadra-Hull™ conditioner tank and the Cullex <sup>®</sup> resin
For a period of TEN YEARS	High Efficiency GBE circuit board, control valve body, excluding internal parts.  The salt storage container, brine valve and all its component parts
For a period of FIVE YEARS	Soft-Minder <sup>®</sup> meter, or Aqua-Sensor <sup>®</sup> probe, if so equipped.
For a period of ONE YEAR	The entire conditioner

If a part described above is found defective within the specified period, you should notify your independently operated Culligan dealer and arrange a time during normal business hours for the dealer to inspect the water conditioner on your premises. Any part found defective within the terms of this warranty will be repaired or replaced by the dealer. You pay only freight from our factory and local dealer charges.

We are not responsible for damage caused by accident, fire, flood, freezing, Act of God, misuse, misapplication, neglect, oxidizing agents (such as chlorine, ozone, chloramines and other related components), alteration, installation or operation contrary to our written instructions, or by the use of accessories or components which do not meet Culligan specifications, is not covered by this warranty. Warranty is void if system is installed outside a building without being rated for outdoor use. Refer to the specifications section in the Installation and Operating manual for application parameters.

Our product performance specifications are furnished with each water conditioning unit. TO THE EXTENT PERMITTED BY LAW, CULLIGAN DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE; TO THE EXTENT REQUIRED BY LAW, ANY SUCH IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE ONE-YEAR PERIOD SPECIFIED ABOVE FOR THE ENTIRE CONDITIONER. As a manufacturer, we do not know the characteristics of your water supply or the purpose for which you are purchasing a water conditioner. The quality of water supplies may vary seasonally or over a period of time, and your water usage rate may vary as well. Water characteristics can also differ considerably if your water conditioner is moved to a new location. For these reasons, we assume no liability for the determination of the proper equipment necessary to meet your requirements, and we do not authorize others to assume such obligations for us. Further, we assume no liability and extend no warranties, express or implied, for the use of this product with a non-potable water source. OUR OBLIGATIONS UNDER THIS WARRANTY ARE LIMITED TO THE REPAIR OR REPLACEMENT OF THE FAILED PARTS OF THE WATER CONDITIONER, AND WE ASSUME NO LIABILITY WHATSOEVER FOR DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, GENERAL, OR OTHER DAMAGES.

Some states do not allow the exclusion of implied warranties or limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Similarly, some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Consult your telephone directory for your local independently operated Culligan dealer, or write Culligan International Company for warranty and service information.

### **Culligan International Company**

9399 W. Higgins Rd., Suite 1100 Rosemont, IL 60018 USA 1-800-CULLIGAN or 1-847-430-2800 www.culligan.com

