



**Jim Doyle, Governor**  
**Cory L. Nettles, Secretary**

March 2, 2005

TG ANALYTICAL LABORATORIES  
RUSS PARKER  
N1022 QUALITY DRIVE  
PO BOX 170  
GREENVILLE WI 54942

DIAMOND WATER CONDITIONING  
TOM GRIESBACH  
N2471 HWY 45  
PO BOX 39  
HORTONVILLE WI 54944

Re: Description: WATER TREATMENT DEVICE- SOFTENER  
Manufacturer: DIAMOND WATER CONDITIONING  
Product Name: DRS4 SERIES  
Model Number(s): DRS4-15, DRS4-24, DRS4-32, DRS-33, DRS4-49 AND DRS4-66  
Product File No: 20040570

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of March 2010.

This approval is contingent upon compliance with the following stipulation(s):

- This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturers published instructions.
- For buildings not served by a municipal water supply, Department of Natural Resources (DNR) written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 266-3415.
- If these approved devices are modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- These cation exchange water softeners shall be sized, installed, programmed and maintained such that wastewater, total dissolved solids and chloride discharges are minimized.

Based on testing data submitted to and reviewed by the department, this approval recognizes that these plumbing products will reduce the concentration of contaminants as specified on pages 1 through 2 of this letter.

**WATER SOFTENING CAPABILITIES  
 PRODUCT FILE NUMBER 20040570  
 TABLE 1 OF 1**

Model Numbers	Capacity*						Flow Rate vs. Pressure Loss
	Rating 1		Rating 2		Rating 3		
DRS4 Series	Grains	Pounds	Grains	Pounds	Grains	Pounds	gpm @ psig
Demand Initiated							
DRS4-15	9,600	2.5	13,500	5.0	15,300	7.0	4.0 @ 5.0
DRS4-24	15,500	3.8	21,700	7.5	24,600	10.5	6.0 @ 9.0
DRS4-32	20,700	5.0	29,000	10.0	32,800	14.0	10.0 @ 15.0
DRS4-33	20,700	5.0	29,000	10.0	32,800	14.0	5.7 @ 6.0
DRS4-49	31,000	7.5	43,500	15.0	49,100	21.0	9.6 @ 15.0
DRS4-66	41,400	10.0	58,000	20.0	65,500	28.0	11.2 @ 15.0

\* The softener capacity rating is based on grains of hardness, due to calcium and magnesium cations, removed (as calcium carbonate) while producing soft water between successive regenerations and is related to the pounds of salt required for each regeneration. The tests run to verify the data for table 1 of 1 were conducted in accordance with WQA standard S-100-85.

This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation that may result from its use.

Sincerely,

Glen W. Schlueter  
 Engineering Consultant-Plumbing Product Reviewer  
 Bureau of Integrated Services  
 Safety and Buildings Division  
 Department of Commerce  
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GWS:gws