



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

December 19, 2003

STA-RITE INDUSTRIES  
OMNIFILTER  
KRIS DOUGLAS  
293 WRIGHT ST  
DELAVAN WI 53115

Re: Description: WATER TREATMENT DEVICE-REVERSE OSMOSIS  
Manufacturer: STA-RITE INDUSTRIES  
Product Name: UNDERSINK REVERSE OSMOSIS SYSTEM  
Model Number(s): RO2000 AND RO2000-TDS  
Product File No: 20020208

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 December 2008.

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.
- A device used to detect increases in the total dissolved solids concentration must be installed on the product water line.
- 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.

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 3 of this letter.

**HEALTH EFFECTING INORGANIC CONTAMINANT REDUCTION CAPABILITIES  
 PRODUCT FILE NUMBER 20020208  
 TABLE 1 OF 3**

**Product Water Production Rate:** 49.2 liters per day (lpd) [13 gallons per day (gpd)]

Tested Contaminant	Tested Influent Concentration (mg/l) <sup>1</sup>
Fluoride (F <sup>-1</sup> )	8.0 ± 10%
Lead (Pb <sup>+2</sup> )	0.15 ± 10%
Nitrate (NO <sub>3</sub> <sup>-</sup> )	27.0 ± 10%
Nitrite (NO <sub>2</sub> <sup>-</sup> )	3.0 ± 10%

**Other conditions:** the contaminant reduction capabilities displayed for table 1 of 3 were generated by testing conducted in accordance with NSF *International* Standard 58. To qualify for fluoride reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 1.5 mg/l. To qualify for lead reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.010 mg/l. To qualify for nitrate/nitrite reduction, the device must reduce the influent challenge water concentrations, such that all effluent concentrations are ≤ 10.0 mg/l (as N), also, no more than 1.0 mg/l (as N) shall be in the form of nitrite.

1 = milligrams per liter (mg/l) are equivalent to parts per million (ppm)  
 ± = plus or minus

≤ = less than or equal to

**HEALTH EFFECTING BIOLOGICAL CONTAMINANT REDUCTION CAPABILITIES  
 PRODUCT FILE NUMBER 20020208  
 TABLE 2 OF 3**

**Product Water Production Rate:** 49.2 liters per day (lpd) [13 gallons per day (gpd)]

**Capacity:** dependent on the type and quantity of particulate matter present in the untreated water; the need for maintenance may be indicated by a significant decrease in flow rate.

Tested Contaminant	Influent Challenge (#/ml)
Cysts/Oocysts <sup>1</sup>	≥ 5.0 x 10 <sup>4</sup>

**Other Conditions:** the contaminant reduction performance capabilities displayed for Table 2 of 3 were verified by testing conducted in accordance with NSF *International* Standard 58. To qualify for cyst/oocyst reduction, the device must reduce the influent challenge concentrations by ≥ 99.95% at each sample point.

1 = the specific organisms covered under this testing protocol include cryptosporidium parvum, entamoeba histolytica, giardia lamblia and toxoplasma gondii

≥ = greater than or equal to  
 #/ml = particles per milliliter

**AESTHETIC CONTAMINANT REDUCTION CAPABILITIES  
PRODUCT FILE NUMBER 20020208  
TABLE 3 OF 3**

**Product Water Production Rate:** 49.2 liters per day (lpd) [13 gallons per day (gpd)]  
**Capacity:** 2,839 liters (l) [750 gallons (gals.)] for free chlorine reduction, this capacity is based on stand alone testing of the R-200 post-filter.

<b>Tested Contaminant</b>	<b>Influent Challenge (mg/l)*<sup>1</sup></b>
Chlorine (free)	2.0 ± 10%
Total Dissolved Solids (NaCl)	750 ± 40

**Other Conditions:** the free chlorine reduction performance capabilities displayed for Table 3 of 3 were verified by testing conducted in accordance with NSF *International* Standard 42. To qualify for free chlorine reduction, the device must reduce the influent challenge concentrations by ≥ 50%; meeting the free chlorine reduction requirements also qualifies the device for the reduction of aesthetic, organic, taste and odor reduction (e.g. geosmin, methylisoborneol); this does not include hydrogen sulfide. The total dissolved solids (TDS) reduction performance capabilities displayed for table 3 of 3 were verified by testing conducted in accordance with NSF *International* Standard 58. To qualify for TDS reduction, the device must reduce the influent challenge concentrations by ≥ 75%.

<sup>1</sup> = milligrams per liter (mg/l) are equivalent to parts per million (ppm)  
± = plus or minus

≥ = greater than or equal to

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  
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Safety and Buildings Division  
Department of Commerce  
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