



Jim Doyle, Governor
Cory L. Nettles, Secretary

August 6, 2004

REGAL WARE, INC.
BILL MACDONALD
1100 SCHMIDT RD
WEST BEND WI 53090

Re: Description: WATER TREATMENT DEVICE-ACTIVATED CARBON
Manufacturer: REGAL WARE, INC.
Product Name: REGALWARE
Model Number(s): CLUB WATER SYSTEMS K6842A, CLUB WATER SYSTEMS K6843B,
K6890C, ULTRACLEAN K6890WH, K6800 SALADMASTER,
ULTRACLEAN K6890, IMPERIAL MAXIMUM K6844,
IMPERIAL MAXIMUM K6845 ALL USING THE KSA1254 CARTRIDGE AND
W5103UC USING THE KSA1255 CARTRIDGE
Product File No: 20040093

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 August 2009.

This approval supercedes the approval issued on March 26, 2002 under product file number 20020015.

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.

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 4 of this letter.

**AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20040093
 TABLE 1 OF 4**

Flow Rate: 2.7 liters per minute (lpm) [0.7 gallon per minute (gpm)]
Capacity: 3,785 liters (l) [1,000 gallons (gals.)] for free chlorine reduction. For particulate reduction the capacity is 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 (mg/l)*, 1
Chlorine (free)	2.0 ± 10%
Particulates (0.5 to < 1.0 µm)	≥ 1.0 x 10 ⁴ #/ml

Other Conditions: the contaminant reduction performance capabilities displayed for Table 1 of 4 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. To qualify for particulate reduction (Class I) the device must reduce the influent challenge concentrations by ≥ 85%.

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

≥ = greater than or equal to

± = plus or minus

#/ml = particles per milliliter

< = less than

µm = micrometers

* = unless otherwise specified

≤ = less than or equal to

**HEALTH EFFECTING INORGANIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20040093
 TABLE 2 OF 4**

Flow Rate: 2.7 liters per minute (lpm) [0.7 gallon per minute (gpm)]
Capacity: 3,785 liters (l) [1,000 gallons (gals.)] for lead reduction.

Tested Contaminant	Influent Challenge Concentration (mg/l) ¹
Lead (Pb ⁺²) ²	0.15 ± 10%

Other Conditions: the contaminant reduction performance capabilities displayed for Table 2 of 4 were verified by testing conducted in accordance with NSF *International* Standard 53. To qualify for lead reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.010 mg/l.

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

≤ = less than or equal to

2 = metals are tested at pH 6.5 and pH 8.5

± = plus or minus

**HEALTH EFFECTING BIOLOGICAL CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20040093
 TABLE 3 OF 4**

Flow Rate: 2.7 liters per minute (lpm) [0.7 gallon per minute (gpm)]
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 ¹	$\geq 5.0 \times 10^4$

Other Conditions: the contaminant reduction performance capabilities displayed for Table 3 of 4 were verified by testing conducted in accordance with NSF *International* Standard 53. To qualify for cyst/oocyst reduction, the device must reduce the influent challenge concentrations by $\geq 99.95\%$ at each sample point.

¹ = the specific organisms covered under this testing protocol include cryptosporidium parvum, entamoeba histolytica, giardia lamblia and toxoplasma gondii
 #/ml = particles per milliliter ≥ = greater than or equal to

**HEALTH EFFECTING ORGANIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20040093
 TABLE 4 OF 4**

Flow Rate: 2.7 liters (l) [0.7 gallon per minute (gpm)]
Capacity: 3,785 liters (l) [1,000 gallons (gals.)]

Tested Contaminant	Influent Challenge (µg/l) ¹
Alachlor	50
Atrazine	100
Benzene	81
Carbofuran	190
Carbon tetrachloride	78
Chlorobenzene	77
Chloropicrin	15
2,4-D	110
Dibromochloropropane (DBCP)	52
o-Dichlorobenzene	80
p-Dichlorobenzene	40
1,2-Dichloroethane	88
1,1-Dichloroethylene	83
cis-1,2-Dichloroethylene	170
trans-1,2-Dichloroethylene	86
1,2-Dichloropropane	80
cis-1,3-Dichloropropylene	79
Dinoseb	170
Endrin	53
Ethylbenzene	88
Ethylene dibromide (EDB)	44
Haloacetonitriles (HAN):	-
Bromochloroacetonitrile	22
Dibromoacetonitrile	24
Dichloroacetonitrile	9.6
Trichloroacetonitrile	15

**HEALTH EFFECTING ORGANIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20040093
 TABLE 4 OF 4 (continued)**

Tested Contaminant	Influent Challenge (µg/l) ¹
Haloketones (HK):	-
1,1-Dichloro-2-propanone	7.2
1,1,1-Trichloro-2-propanone	8.2
Heptachlor	25
Heptachlor epoxide	10.7
Hexachlorobutadiene	44
Hexachlorocyclopentadiene	60
Lindane	55
Methoxychlor	50
Pentachlorophenol	96
Simazine	120
Styrene	150
1,1,2,2-Tetrachloroethane	81
Tetrachloroethylene	81
Toluene	78
2,4,5-TP (silvex)	270
Tribromoacetic acid	42
1,2,4-Trichlorobenzene	160
1,1,1-Trichloroethane	84
1,1,2-Trichloroethane	150
Trichloroethylene	180
Trihalomethanes	-
chloroform (surrogate chemical)	300
bromoform	-
bromodichloromethane	-
chlorodibromomethane	-
Xylenes (total)	70

Other Conditions: the contaminant reduction performance capabilities displayed for Table 4 of 4 were verified by testing conducted in accordance with NSF *International* Standard 53. To qualify for the reduction of the organic contaminants listed above, the device must reduce the influent challenge concentration of chloroform at 300 µg/l ± 10% at each sample point by a minimum of 95%.

¹ = micrograms per liter (µg/l) are equivalent to parts per billion (ppb)

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
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 Safety and Buildings Division
 Department of Commerce
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