



Jim Doyle, Governor
Mary P. Burke, Secretary

December 27, 2005

REVISED COPY

THE PROCTOR AND GAMBLE COMPANY
HEALTH CARE
ANN MCGHEE
8700 MASON-MONTGOMERY RD.
MASON OH 45040-9462

SEARS ROEBUCK & COMPANY
TOM DESALVO
3333 BEVERLY RD
HOFFMAN ESTATES IL 60179

Re: Description: WATER TREATMENT DEVICE-ACTIVATED CARBON
Manufacturer: SEARS ROEBUCK & COMPANY
Product Name: KENMORE REFRIGERATOR FILTERS
Model Number(s): KENMORE T1KB1, KENMORE ADVANCED T1KB1,
KENMORE ULTIMATE T1KB1 AND KENMORE ULTIMATE II T1KB1
ALL USING THE T1RFKB1 CARTRIDGE
Product File No: 20050801

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 May 2009.

This approval supercedes the approval issued on May 5, 2004 under product file number 20040156.

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 this approved device is 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.
- This filtration system, and the associated cartridges, may only be installed and used with Sears Kenmore Side by Side Refrigerators with a Push Button In-Grille Filter. The filtration system and the associated cartridges are not approved for use in any other type of Sears Kenmore refrigerator or refrigerators manufactured by companies other than Sears.
- This device must be installed along with a performance indication device (PID). The PID installed must be the same model of PID that was evaluated under NSF International Test Report # 513329-03.
- 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.

- These devices will only reduce the concentration of volatile organic chemicals at water outlets that are served by the devices. There are dermal (skin) absorption and inhalation exposure risks associated with volatile organic chemicals. Therefore, using point-of-use devices such as these will not protect all routes of potential exposure. Potentially hazardous exposures to volatile organic chemicals will remain possible at unprotected outlets, particularly hot water outlets (e.g. bathing, showering, clothes washing or dish washing).

If, by way of reputable water analyses, a water supply is known to contain unsafe levels of volatile organic chemicals, then all the water entering the residence must be treated at the point-of-entry using an approved water treatment device to address all potential routes of exposure.

- These devices will only reduce the concentration of cysts/oocysts at water outlets that are served by the devices. Therefore, using point-of-use devices such as these will not protect all routes of potential exposure. Potentially hazardous exposures to cysts/oocysts will remain possible at unprotected outlets.

The presence of cysts/oocysts strongly suggests that other pathogens (e.g. bacteria, virus) may also be present.

If, by way of reputable water analyses, a water supply is known to contain cysts/oocysts, then all the water entering the residence must be treated at the point-of-entry, using an approved water treatment device, to address all potential routes of exposure thereby providing a biologically safe water supply.

Based on testing data submitted to and reviewed by the department, this approval recognizes that this plumbing product will reduce the concentration of contaminants as specified on pages 1 through 6 of this letter.

**AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20050801
 TABLE 1 OF 5**

Flow Rate: 1.9 liters (l) [0.5 gallon per minute (gpm)]
Capacity: 379 liters (l) (100 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 5 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

**HEALTH EFFECTING INORGANIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20050801
 TABLE 2 OF 5**

Flow Rate: 1.9 liters (l) [0.5 gallon per minute (gpm)]
Capacity: 379 liters (l) (100 gals.) for lead and mercury reduction. For asbestos 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 Concentration (mg/l) ¹
Asbestos fibers (> 10 µm in length)	1.0 x 10 ⁷ to 1.0 x 10 ⁸ F/l
Lead (Pb ⁺²) ²	0.15 ± 10%
Mercury (Hg ⁺²) ²	0.006 ± 10%

Other Conditions: the contaminant reduction performance capabilities displayed for Table 2 of 5 were verified by testing conducted in accordance with NSF *International* Standard 53. To qualify for asbestos reduction, the device must reduce the influent challenge concentrations by ≥ 99%. 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 mercury reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.002 mg/l.

1 = milligrams per liter (mg/L) are equivalent to parts per million (ppm)
 * = unless otherwise specified
 ± = plus or minus

2 = metals are tested at pH 6.5 and pH 8.5
 ≤ = less than or equal to
 F/l = fibers per liter

**HEALTH EFFECTING ORGANIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20050801
 TABLE 3 OF 5**

Flow Rate: 1.9 liters (l) [0.5 gallon per minute (gpm)]
Capacity: 379 liters (l) (100 gals.)

Tested Contaminant	Influent Challenge (µg/l) ¹
Alachlor	40 ± 10%
Atrazine	9.0 ± 10%
Benzene	15.0 ± 10%
Chlorobenzene	2,000 ± 10%
o-Dichlorobenzene	1,800 ± 10%
Endrin	6.0 ± 10%
Ethylbenzene	2,100 ± 10%
Lindane	2.0 ± 10%
Methyl <i>tert</i> -butyl ether (MtBE)	15.0 ± 20%
Tetrachloroethylene	15.0 ± 10%
Toxaphene	15.0 ± 10%
Trihalomethanes (as chloroform)	450 ± 10%

Other Conditions: the contaminant reduction performance capabilities displayed for Table 3 of 5 were verified by testing conducted in accordance with NSF *International* Standard 53. To qualify for alachlor reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 2.0 µg/l. To qualify for atrazine reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 3.0 µg/l. To qualify for benzene reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 5.0 µg/l. To qualify for chlorobenzene reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 100 µg/l. To qualify for o-dichlorobenzene reduction, the device must reduce the influent challenge concentrations such that all

(continued from page 3 of 6)

effluent concentrations are $\leq 600 \mu\text{g/l}$. To qualify for endrin reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are $\leq 2.0 \mu\text{g/l}$. To qualify for ethylbenzene reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are $\leq 700 \mu\text{g/l}$. To qualify for lindane reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are $\leq 0.2 \mu\text{g/l}$. To qualify for methyl *tert*-butyl ether (MtBE) reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are $\leq 5.0 \mu\text{g/l}$. To qualify for tetrachloroethylene reduction the device must reduce the influent challenge concentrations such that all effluent concentrations are $\leq 5.0 \mu\text{g/l}$. To qualify for toxaphene reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are $\leq 3.0 \mu\text{g/l}$. To qualify for trihalomethane reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are $\leq 80 \mu\text{g/l}$.

1 = micrograms per liter ($\mu\text{g/l}$) are equivalent to parts per billion (ppb)
 \leq = less than or equal to

\pm = plus or minus

**HEALTH EFFECTING BIOLOGICAL CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20050801
 TABLE 4 OF 5**

Flow Rate: 1.9 liters (l) [0.5 gallon per minute (gpm)]
Capacity: dependent on the type and quantity of particulate matter present in the influent 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 4 of 5 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
 \geq = greater than or equal to
 #/ml = particles per milliliter

**HEALTH EFFECTING ORGANIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20050816
 TABLE 5 OF 5**

Flow Rate: 1.9 lpm (0.5 gpm)
Capacity: 1,022 l (270 gals.)

Tested Contaminant	Influent Challenge ($\mu\text{g/l}$) 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

**HEALTH EFFECTING ORGANIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20050816
 TABLE 5 OF 5 (continued from previous page)**

Flow Rate: 1.9 lpm (0.5 gpm)
Capacity: 1,022 l (270 gals.)

Tested Contaminant	Influent Challenge (µg/l)¹
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
Haloketones (HK):	-
1,1-Dichloro-2-propanone	7.2
1,1,1-Trichloro-2-propanone	8.2
Heptachlor (H-34, HEPTOX)	80
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)	300
Xylenes (total)	70

Other Conditions: the contaminant reduction performance capabilities displayed for Table 5 of 5 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) ± = plus or minus
 ≤ = less than or equal to

Sears, Roebuck & Company
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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
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GWS:gws