

Performance Data Sheet

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CMF-HFC-1000 Drinking Water System

CMF-HFC-1000 Replacement Cartridge Part No. RC-HFC-1000/RC-CMF417-2.5 (2 required)

Read this Performance Data Sheet and compare the capabilities of this unit with your actual drinking water needs. Bear in mind that this system is your final barrier of protection against unknown contaminant's which may be affecting your water supply.

Water Testing: If your water has an aesthetic problem - one you can see, taste or smell - your senses are your most reliable resource. If you have read about or suspect volatile organic chemicals, chlorinated by-products or lead contamination you may want to have your water tested. But be careful...water testing can be expensive. A complete analysis of hundreds of contaminant's that may be in water can cost

hundreds of dollars, or even thousands of dollars. A betterand less alternative is to have your water tested only for common water contaminant's, or for contaminant's you have read about or know are likely to be in your water. Additionally, they may not be as conclusive as you might like, since contaminant levels can vary from day to day and week to week. Taking a specific sample at any given time may yield a falsely good (or bad) result.

Private water supply: Having your water tested may be your only way of knowing for sure what health related contaminant's might be present. Local health departments only test for a limited range

of contaminant's like bacteria to approve the well for potable water. **Public Water supply:** Which service more that 3/4 of the population in America are already tested, following state and federal guidelines and law and are available for the asking from your water supply company/utility. These guidelines and laws do not cover every known contaminant that may be affecting your water source.

Water the Way you Want It: Many times it is a better investment, both in terms of money and peace of mind, to invest in a quality drinking water system that solves a wide range of problems that you may or

Health Claim Performance

The HFC-1000 cartridge #1 has been tested to NSF/ANSI Standards 42, 53 & NSF P473 for the reduction of the substances listed below. 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 & 53, & NSF P473.

See Page 2 for the CMF417-2.5 cartridges #2&3 performance

Substance I	nfluent Challenge Concentration	Min % Reduction Requirement/ Minimum Max Permissible Product Water Reduction Concentration		Average Reduction					
Standard 42 - Aesthetic Effects									
Chlorine	2.0 mg/L +-10%	>=50%	N/A	99.0%					
Particulate Class 1 Particles 0.5-1.0 micron	>10,000 particles / mL	>=85%	88.2%	88.9%					
Standard 53 - Health Effects									
Chloroform (VOC surrogate	300ug/L +-10% chemical)	>= 95%	99.1%	99.8%					
MTBE (Methyl tert-Buty	0.015mg/L +-20% /I Ether)	<=0.005mg/L	93.5%	95.6%					
TTHM (as chloroform)	0.450mg/L +-10%	<=0.080/mg/L	99.9%	99.9%					
Turbidity	10.0-12.0 NTU s	<=0.5NTU	97.7%	99.05%					
Cysts	>50,000 /L	>= 99.95%	99.97%	99.98%					
Lead 6.5 pH	0.15mg/L +-10%	<=0.010	98.2%	99.6%					
Lead 8.5 pH	0.15mg/L +-10%	<=0.010	99.7%	99.9%					

NSF Protocol P473 Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS) (1) PFOA/PFOS 1500 ng/L +- 10% 70 na/L 98.1% 96%

Operating Specifications

*Capacity: HFC-1000 cartridge #1 - 500 gallons (1890L), CMF417-2.5 cartridge# 2 & 3 were tested for 10000 gallons (38,000L)

Lead testing passed at 1585 gallons as tested to NSF/ANSI std 53 by WQA!

*Pressure requirements: 30-125 psi (2.1-8.6 bar),non-shock

*Temperature: 35-100 degrees F (2-38 degrees C

*Flow Rate: 1.5 gpm (5.7 Lpm)

(1) not certified by WQA,

"The end-user should not attempt to regenerate and reuse spent media from this product"

Performance Data Sheet Reduction Claims for Organic Chemicals Included by Surrogate Testing

Substance	Influent Challenge Concentration mg/L	Maximum permissble Product Water Concentration mg/L
alachlor	0.050	0.001
atrazine	0.100	0.003
benzene	0.081	0.001
carbofuran	0.190	0.001
carbon tetrachloride	0.078	0.0018
Chlorobenzene	0.077	0.001
chloropicrin	0.015	0.0002
2.4D	0.110	0.0017
dibromochloropane (DBCP)	0.062	0.00002
o-dichlorobenzene	0.080	0.001
p-dichlorobenzene	0.040	0.001
1,2-dichloroethane	0.088	0.0048
1,1-dichloroethylene	0.083	0.001
ois-1,2-dichloroethylene	0.170	0.0005
trans-1,2-dichloroethylene	0.086	0.001
1,2-dichloropopane	0.080	0.001
ois-1,3-dichloropropylene	0.079	0.001
dinoseb	0.170	0.0002
endrin	0.053	0.00059
ethylbenzene	0.088	0.00039
ethylene dibromide (EDB)	0.044	0.00002
haloacetonitriles (HAN):	0.044	0.00002
bromochloroacentonitrile	0.022	0.0008
dibromoacetonitrile	0.024	0.0006
dichloroacetonitrile	0.0096	0.0002
	0.0096	0.0002
trichioroacetonitrile	0.015	0.0003
haloketones (HK)	0.0070	0.0004
1,1-dichloro-2-propanone	0.0072	0.0001
1,1,1-trichloro-2-propanone	0.0082	0.0003
heptachlor	0.25	0.00001
heptachlor epoxide	0.0107	0.0002
hexachlorobutadiene	0.044	0.001
hexahlrorocyclopentadiene	0.060	0.000002
lindanė	0.065	0.00001
methoxychlor	0.050	0.0001
pentachlorophenol	0.096	0.001
simazine	0.120	0.001
styrene	0.150	0.0005
1,1,2,2-tetrachioroethane	0.081	0.001
tetrachloroethylene	0.081	0.001
toluene	0.078	0.001
2,4,5-TP (silvex)	0.270	0.0016
tribromoacetic acid	0.042	0.001
1,2,4-trichlorobenzene	0.160	0.0005
1,1,1-trichloroethane	0.084	0.0046
1,1,2-trichloroethane	0.150	0.0005
trichloroethylene	0.180	0.001
trihalomethanes (includes): chloroform (surrogate chemical)		90000
bromoform bromodichloromethane	0.300	0.015
chlorodibromomethane	12,700%	-NG-109
xylenes (total)	0.070	0.001

Certified Performance

DWS-CMF-TWIN · (Cartridge #2 & 3 in Series in this CMF-HFC-1000 system has been Certified/Validated performance tested using the protocols as recommended in the USEPA Public Drinking Water Guidance Manuals & US EPA P-231& approved by WQA without the protection of a Pre-Filter

RC-CMF417-2.5 Cartridge 2 & 3: CMF417-2.5 Media is Certified to NSF/ANSI Std 42 by WQA Gold Seal Program all other materials conform to NSF/ANSI Std 42 & Std 53 requirements.

Meets and exceeds NSF P231 Requirements

MS2 Bacteriophage Virus >99.998% RT Bacteria >99.9999% Cryptosporidium cysts >99.999% Legionella pneumophila >99.9999%* Note: No detectable organisms after system!

*As tested by BCS Labratory

With the CMF-TWIN Charged Membrane Filter included in your treatment train within this system it provides Protection from the Microbiological organisms that may be in your source water supply before, during and after Boil Order Advisory!

Home, Office Business & Industrial Applications for Superior Drinking Water filtration and a safe guard from the unknown issues facing our water supplies.

Use on potable water supplies, Public or Private water supplies requiring continuous purification, and for temporary use on non-potable water supplies suspected of being potable, excluding converting waste water to microbiologically-potable water.

LIMITED WARRANTY

Waterline warrants this product to be free of defects in workmanship or materials for twelve months from date of purchase or 24 months from date of manufacture. This warranty extends only to the original consumer and does not cover products which malfunction due to neglect or unauthorized modification. Warranty does not cover in-house labor or other labor charges.

The unit must be used in operating conditions that conform to Waterline's recommended design guidelines. This warranty will not apply if the unit has been modified, repaired or altered by someone not authorized by Waterline. We are not responsible for damage caused by accident, fire, flood, freezing, Act of God, misuse, misapplication, neglect, oxidizing agents or operation contrary to printed instructions, or by the use of accessories or components not recommended in our installation guide.

System is not warranted to perform on a non-potable water source, or a water source which does not meet the conditions for use described in the installation guide or performance data sheet for these products. Water characteristics can vary seasonally or over a period of time. Waterline recommends having your water tested from time to time for any health related type contaminant that you are concerned with or that may be in your water supply before or after this unit.

OUR OBLIGATIONS UNDER THIS WARRANTY ARE LIMITED TO THE REPAIR OR REPLACEMENT (AT WATERLINE'S DISCRETION) OF THE FAILED PARTS OF THE SYSTEM, AND WE ASSUME NO LIABILITY WHATSOEVER FOR DIRECT, INDIRECT, INCIDENTIAL, CONSEQUENTIAL, SPECIAL, GENERAL OR OTHER DAMAGES.

To obtain warranty performance:

A: Call Technical Service at the number listed below to obtain a RGA (Return Goods Authorization Number). No returns accepted without RGA number and Waterline reserves the right to dispose of any items returned without RGA after 30 days.

- B: Return this product with the RGA number clearly marked on the carton to Waterline transportation or mail prepaid, with an attached statement giving the date and place of purchase, the nature of the defect and your return address, and if possible your telephone number.
- C: Upon receipt, Waterline will examine your claim. If this warranty applies, Waterline, at its option will either replace or repair this product.
- D: Please send all returns or warranty questions to: Waterline Technology 961 N. Main St., Ste 102, Mansfield, OH 44903, 1-800-522-3949.

This Warranty is given in lieu of all other warranties expressed or implied, written or oral. No employee, agent, dealer, or other person is authorized to give any warranties on behalf of Waterline . NOTE: Some states do not allow limitation on how long an implied warranty lasts so the above limitation may not apply to you. Similarly some states do not allow the exclusion or limitation of consequential or incidental damages so the above limitation or exclusions may not apply to you. This warranty gives you special legal rights. You may also have other rights which may vary from state to state. Proof of purchase must accompany all merchandise returns if more than 12 months from date of Manufacture.

General Installation/Operation/Maintenance Requirements

- *Space required: 15 x 5 x 23 in. (13 x 13 x 53 cm) including 2.5 inches of clearance under unit for cartridge change. *Recommended to install vertically
- *Flush new cartridge at full flow for several minutes until water runs clear.
- * Replace HFC-1000 cartridge when capacity is reached, or when flow becomes too slow, but at least once per year and the CMF417-2.5 cartridges at least every 36 months. *Installation instructions, and this performance data sheet available on our company website, or by request via email
- * This system must be maintained according to manufacturer's instructions, including replacement of filter cartridge. Suggested Retail RC-HFC-1000 \$159.75 USD RC-CMF417-2.5 \$259.75 USD each

Additional important NOTES:

or USPS mail. .

- * Do not use with water that is microbiologically unsafe, or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.
- *The contaminant's or other substances reduced by this water treatment system are not necessarily in your water. *Check for compliance with state and local laws and regulations.
- *System tested under standard laboratory conditions, actual performance may vary.

Buyer			
Seller			
Date			



The RC-HFC-1000 cartridge is certified by WQA to CSA B483.1, NSF/ANSI 42 & 53 for specific performance claims as verified and substanitated by test data:



The RC-HFC-1000 cartridge is certified by IAPMO R&T to CSA B483.1, NSF/ANSI 42 & 53 & NSF protocol P473 for specific performance claims as verified and substantiated by test data:



Std. No. 42 - Aesthetic effects
Chemical Reduction
Taste and odor
Chlorine Taste and odor
Mechanical Filtration

Particulate Class 1 (0.5-1.0 micron)

Std No. 53 - Health effects Chemical Reduction

Lead MTBE VOC's TTHM's



to WQA/ASPE S-803 for Sustainability

Mechanical Filtration Turbidity Cysts

NSF P473- PFOA/PFOS*

California Water Boards Certification Number 3330

*not certified by WQA