NSF Performance Data - CB-EXTRA

NSF/ANSI 42 - Aesthetic Effects

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
CHLORAMINE	>97.5%	3.0 +/- 10%	0.5
CHLORINE	>97.5%	2.0 ± 10%	≥ 50%
Particulate Class I	99.8%	min. 10,000 particles/mL	≥ 85%*

NSF/ANSI 53 - Health Effects

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
ALACHLOR	>98%	0.050	0.001
ARSENIC (pH 6.5)	>98%	0.050 ± 10%	0.010
ARSENIC (pH 8.5)	97.6%	0.050 ± 10%	0.010
ASBESTOS	>99%	$10^7$to 10^8filbers/L	99%*
ATRAZINE**	>97%	0.100	0.003
BENZENE**	>99%	0.081	0.001
BROMODICHLOROMETHANE (TTHM)**	>99.8%	0.300	0.015
BROMOFORM (TTHM)**	>99.8%	0.300	0.015
CARBOFURAN (Furadan)**	>99%	0.19	0.001
CARBON TETRACHLORIDE**	98%	0.078	0.0018
CHLORDANE	>99.5%	0.040 ± 10%	0.002
CHLOROBENZENE (Monochlorobenzene)**	>99%	0.077	0.001
CHLOROPICRIN**	99%	0.015	0.0002
CHLOROFORM (TTHM)* (surrogate chemical)	>99.8%	0.300	0.015
Cryptosporidium (CYST)	>99.95%	minimum 50,000/L	99.95% reduction requirement
CYST	>99.95%	min. 50,000/L	99.95%*
2, 4-D*	98%	0.110	0.0017
DBCP (see Dibromochloropropane)**	>99%	0.052	0.00002
1,2-DCA (see 1,2-DICHLOROETHANE)**	95%	0.088	0.0048
1,1-DCE (see 1,1-DICHLOROETHYLENE)**	>99%	0.083	0.001
DIBROMOCHLOROMETHANE**	>99.8%	0.300	0.015
DIBROMOCHLOROPROPANE (DBCP)**	>99%	0.052	0.00002
o-DICHLOROBENZENE (1,2 Dichlorobenzene)**	>99%	0.080	0.001
p-DICHLOROBENZENE (para-Dichlorobenzene)**	>98%	0.040	0.001
1,2-DICHLOROETHANE (1,2-DCA)**	95%	0.088	0.0048
1,1-DICHLOROETHYLENE (1,1-DCE)**	>99%	0.083	0.001
Toxoplasma (see CYSTS)	99.95%	minimum 50,000/L	99.95% reduction requirement
2,4,5-TP (Silvex)**	99%	0.270	0.0016
1,2-DICHLOROPROPANE**	>99%	0.080	0.001

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
CIS-1,3- DICHLOROPROPYLENE**	>99%	0.079	0.001
DINOSEB*	99%	0.170	0.0002
EDB (see ETHYLENE DIBROMIDE)**	>99%	0.044	0.00002
ENDRIN**	99%	0.053	0.00059
Entamoeba (see CYSTS)	99.95%	minimum 50,000/L	99.95% reduction requirement
ETHYLBENZENE**	>99%	0.088	0.001
ETHYLENE DIBROMIDE (EDB)**	>99%	0.044	0.00002
Furadan (see CARBOFURAN)**	>99%	0.19	0.001
Giardia Lamblia (see CYST)	>99.95%	minimum 50,000/L	99.95% reduction requirement
HALOACETONITRILES (HAN)**			
BROMOCHLOROACETONITRILE	98%	0.022	0.0005
DIBROMOACETONITRILE	98%	0.024	0.0006
DICHLOROACETONITRILE	98%	0.0096	0.0002
TRICHLOROACETONITRILE	98%	0.015	0.0003
HALOKETONES (HK):**			
1,1-DICHLORO-2-PROPANONE	99%	0.0072	0.0001
1,1,1-TRICHLORO-2-PROPANONE	96%	0.0082	0.0003
HEPTACHLOR**	>99%	0.25	0.00001
HEPTACHLOR EPOXIDE**	98%	0.0107	0.0002
HEXACHLOROBUTADIENE**	>98%	0.044	0.001
HEXACHLOROCYCLOPENTADIENE**	>99%	0.060	0.000002
LEAD (pH 6.5)	>99.7%	0.15 ± 10%	0.010
LEAD (pH 8.5)	>99.3%	0.15 ± 10%	0.010
LINDANE*	>99%	0.055	0.00001
MERCURY (pH 6.5)	>96.6%	0.006 ± 10%	0.002
MERCURY (pH 8.5)	>96.7%	0.006 ± 10%	0.002
METHOXYCHLOR*	>99%	0.050	0.0001
Methylbenzene (see TOLUENE)**	>99%	0.078	0.001
Monochlorobenzene (see CHLOROBENZENE)**	>99%	0.077	0.001
MTBE (methyl tert-butyl ether)	97%	0.015 ± 20%	0.005
POLYCHLORINATED BIPHENYLS (PCBs , Aroclor 1260)	>96.8%	0.01 +/- 10%	0.0005
PCB	>96.8%	0.01 ± 10%	0.0005
PCE (see TETRACHLOROETHYLENE)**	>99%	0.081	0.001
PENTACHLOROPHENOL**	>99%	0.096	0.001
Perchlorobutadiene (see HEXACHLOROBUTADIENE)*	>98%	0.044	0.001
PFOA/PFOS	>95.5%	0.0015 ± 10%	0.0001
Propylene Dichloride (see 1,2 -DICHLOROPROPANE)*	>99%	0.080	0.001
SIMAZINE*	>97%	0.120	0.004
Silvex (see 2,4,5-TP)**	99%	0.270	0.0016
STYRENE (Vinylbenzene)**	>99%	0.150	0.0005
1,1,1-TCA (see 1,1,1 - TRICHLOROETHANE)**	95%	0.084	0.0046
TCE (see TRICHLOROETHYLENE)**	>99%	0.180	0.0010
1,1,2,2- TETRACHLOROETHANE**	>99%	0.081	0.001
TETRACHLOROETHYLENE**	>99%	0.081	0.001
TOLUENE (Methylbenzene)**	>99%	0.078	0.001
TOXAPHENE	>95%	0.015 ± 10%	0.003
Toxoplasma (see CYSTS)	99.95%	minimum 50,000/L	99.95% reduction requirement
2,4,5-TP (Silvex)**	99%	0.270	0.0016

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
TRIBROMOACETIC ACID**	>98%	0.042	0.001
1,2,4 TRICHLOROBENZENE (Unsymtrichlorobenzene)*	>99%	0.160	0.0005
1,1,1-TRICHLOROETHANE (1,1,1-TCA)**	95%	0.084	0.0046
1,1,2-TRICHLOROETHANE*	>99%	0.150	0.0005
TRICHLOROETHYLENE (TCE)*	>99%	0.180	0.0010
TRIHALOMETHANES (TTHM) (Chloroform; Bromoform; Bromodichloromethane; Dibromochloromethane)	95%	0.300	0.015
TURBIDITY	99.0%	11 ± 1 NTU	0.5 NTU
Unsym-Trichlorobenzene**	>99%	0.160	0.0005
Vinylbenzene (see STYRENE)**	>99%	0.150	0.0005
XYLENES (TOTAL)**	>99%	0.070	0.001

Standard 401 - Incidental Contaminants / Emerging Compounds

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
Particulate Class I	99.8%	min. 10,000 particles/mL	≥ 85%*
Group I			
Atenolol	>96.4%	200 ± 20%	0.00003
Carbamazepine	>98.5%	1400 ± 20%	0.0002
DEET	>98.6%	1401 ± 20%	0.0002
Linuron	>96.5%	140 ± 20%	0.00002
Meprobamate	>95.3%	400 ± 20%	0.00006
Metolachlor	>98.7%	1400 ± 20%	0.0002
Trimethoprim	>96.8%	140 ± 20%	0.00002
Group II			
TCEP (Group 2)	>98.0%	5000 ± 20%	0.0007
TCPP (Group 2)	>97.9%	5000 ± 20%	0.0007
Group III			
Bisphenol A (Group 3)	>99.0%	2000 ± 20%	0.0003
Estrone (Group 3)	>96.6%	140 ± 20%	0.00002
Ibuprofen (Group3)	>95.1%	400 ± 20%	0.00006
Naproxen (Group 3)	>96.4%	140 ± 20%	0.00002
Nonyl phenol (Group 3)	>95.6%	1400 ± 20%	0.0002
Phenytoin (Group 3)	>95.4%	200 ± 20%	0.00003

NSF/ANSI Protocol P231 - Viruses & Bacteria

Substance	Percent Reduction**	Influent challenge concentration (mg/L unless specified)	Maximum permissible product water concentration (mg/L unless specified)
Bacteria, R. Terringena (ATCC-33257)	≥ 99.9999%	2.8 x 107/100 mL	6 log
Virus, MS2 (ATCC-15597-B1)	≥ 99.99%	4.3 x 10^4/mL	4 log

Footnotes

*Chloroform was used as a surrogate for claims of reduction of Volatile Organic Chemicals (VOC). CB Tech systems tested at >99.8% actual reduction of Chloroform. Percent reduction shown herein reflects the allowable claims for VOCs as per tables in the Standard. **Percent reduction reflects actual performance of the CB Tech product as specifically tested (at 120% of capacity). Percent reduction shown for VOCs reflects the allowable claims for Volatile Organic Chemicals/Compounds as per Tables. Chloroform was used as a surrogate for VOC reduction claims: CB Tech systems tested at >99.8% actual reduction of Chloroform (at 120% of capacity). ***NSF Standard 401 has been deemed as "incidental contaminants/emerging compounds". Incidental contaminants are those compounds that have been detected in drinking water supplies at trace levels. While occurring at only trace levels, these compounds can affect the public acceptance/perception of drinking water quality.

1. **This system is not intended to convert wastewater or raw sewage into drinking water.**
2. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.
3. CB Tech Drinking Water Systems have been certified, as indicated, by NSF International for compliance to NSF/ANSI Standard Nos. 42, 53, 58, 401 and Protocol P231. CB Tech Drinking Water Systems have been registered by the California State Water Resources Control Board for the reduction of specific contaminants.
4. Filter life will vary in proportion to the amount of water used and the level of impurities in the water being processed. For optimum performance, it is essential that the filter be replaced on a regularly scheduled basis as follows: (a) annually; (b) when the unit's rated capacity has been reached; (c) the flow rate diminishes; or (d) the filter becomes saturated with bad tastes and odors.
5. Do not allow water to freeze in the unit. If unit is exposed to freezing temperatures, drain water from unit and remove filter.
6. Do not allow water to sit in unit for extended periods of time (10 or more days) without being used. If unit is to be left unused for more than 10 days, drain all water from the system and remove the filters. Upon your return, reconnect the filters in the housing and continue use. In the event water does sit in the unit for 10 or more days, the system should be flushed by allowing water to flow to waste for about 10 minutes; then continue use as normal.
7. CB Tech warrants to the original retail customer its DWS and components to be free of defects in material and workmanship for use under normal care.
8. Please see the Owner's Manual for installation instructions and operating procedures.
9. In compliance with New York law, it is recommended that before purchasing a water treatment system, NY residents have their water supply tested to determine their actual water treatment needs. Please compare the capabilities of the CB Tech unit with your actual water treatment needs.
10. While testing was performed under standard laboratory conditions, actual performance may vary.
11. The list of substances which the treatment device reduces does not necessarily mean that these substances are present in your tap water.
12. CB Tech's CB-EXTRA have been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not reduce other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic.

CB-EXTRA Specifications

Model Name:	CB-EXTRA
Filter Capacity:	340 Gallons
Replacement Filter Type:	CBXT
Flow Rate:	0.71 gpm
Pressure Vessel Composition:	Stainless Steel
Rubber Items:	Silicone
Outlet:	1/4" NPT
Inlet:	1/4" NPT
Working Pressure Range:	30 psi (2.1 kg/cm^2) to 100 psi (7.0 kg/cm^2)
Operating Temperature Range:	32° F (0° C) to 100° F (38° C) - for cold water use only
Particle Retention Size:	0.5 micron (sub-micron)
Certified By:	NSF International

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To discuss your requirements
and to request a quote, please contact:
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