CamelBak® Relay™ Fresh Filter Tech Data
Inlet/Outlet Efficacy Evaluation Result

Background

The CamelBak Relay home filtration pitcher has been tested by an independent third-party laboratory against NSF/ANSI Standard 42 for the reduction of chloramine, chlorine, taste, and odor.

NSF is an internationally recognized, independent standards and testing agency. NSF sets global standards for water filtration systems and other household products. NSF/ANSI Standard 42 establishes the minimum requirements for the certification of [home] filtration systems designed to reduce specific aesthetic or non-health-related contaminants (chlorine, taste, odor and particulates) that may be present in public or private drinking water.

Chlorine Test Method

A test sample was prepared with 2 mg/L (2ppm or 2 parts per million) of chlorine and poured through the inlet and outlet filter of the Relay pitcher as in normal use. Chlorine concentration was measured in the filtered water to calculate an average reduction %.

During the test a total of 80 gallons of water was processed through the filter (corresponding to the 80 gallon filter life claim) and the reduction was measured at regular intervals to confirm the reduction efficacy. Two complete runs were conducted (Sample 1 and Sample 2) for verification.

Chlorine Test Results

Sample Point (% of 80 Gallon Filter Life)	Unfiltered Chlorine Concentration (ppm)	Sample 1 Filtered Water Average Concentration (ppm)	Sample 2 Filtered Water Average Concentration (ppm)	Sample 1 Average Reduction Efficacy (%)	Sample 2 Average Reduction Efficacy (%)	Overall Avg. Chlorine Reduction (%)
30%	2.0	0.05	0.06	97.5	96.5	**97.3**
40%	2.0	0.05	0.06	97.5	97.5	**97.3**
50%	2.0	0.05	0.06	97.5	97.0	**97.3**
60%	2.0	0.05	0.06	97.5	97.5	**97.3**
70%	2.0	0.05	0.06	96.4	94.4	**97.0**
80%	2.0	0.05	0.06	97.4	97.4	**97.1**
90%	2.0	0.06	0.06	95.9	97.4	**97.0**
100%	1.9	0.05	0.06	97.4	96.4	**97.0**

Notes: Test water chlorine concentration 2.0 mg/L, pH 7.4, Total Solids 340 mg/L, Temperature 22°C

Chloramine Test Method

A test sample was prepared with 3.0 mg/L (3ppm or 3 parts per million) of chloramine and poured through the inlet and outlet filter of the Relay pitcher as in normal use. Chloramine concentration was measured in the filtered water to calculate an average reduction %.

During the test a total of 80 gallons of water was processed through the filter (corresponding to the 80 gallon filter life claim) and the reduction was measured at regular intervals to confirm the reduction efficacy. Two complete runs were conducted (Sample 1 and Sample 2) for verification.

Chloramine Test Results

Sample Point (% of 80 Gallon Filter Life)	Unfiltered Chloramine Concentration (ppm)	Sample 1 Filtered Water Average Concentration (ppm)	Sample 2 Filtered Water Average Concentration (ppm)	Sample 1 Average Reduction Efficacy (%)	Sample 2 Average Reduction Efficacy (%)	Overall Avg. Chloramine Reduction (%)
30%	3.30	0.15	0.26	95.5	92.1	**93.8**
40%	3.30	0.15	0.17	95.5	94.8	**95.2**
50%	2.72	0.11	0.15	95.0	94.5	**94.8**
60%	3.27	0.29	0.31	91.1	90.5	**90.8**
70%	2.95	0.19	0.21	93.5	92.9	**93.2**
80%	2.71	0.20	0.27	92.5	90.0	**91.3**
90%	3.03	0.14	0.20	95.4	93.4	**94.4**
100%	2.81	0.22	0.33	92.2	88.3	**90.3**

Notes: Test water average: chloramine concentration 3.02 mg/L, pH 8.8, Total Solids 454 mg/L, Temperature 22.8°C

Conditions and Warnings

Use with potable tap water only. Do not use with water that is not safe to drink. Do not add fruit, juice or substances other than water.

Do not fill the pitcher with hot water (>100F).