

E Performance Data Sheet

The eSpring™ Water Treatment System is listed with the NSF International and WQA.

The following product information is presented in compliance with NSF International and WQA disclosure requirements.

eSpring System No.: 10-0185-E

Replaceable Filter Cartridge No.: 10-0186-E

Functional Description: The eSpring Water Treatment System is comprised of a compressed activated carbon block filter and an ultraviolet lamp. The filter is composed of two outer non-woven pre-filters, and a layer of immobilized activated carbon.

This water treatment system is certified as a class B system in compliance with NSF/ANSI Standard 55 and is equipped with an ultraviolet (UV) lamp that requires replacement at intervals in accordance with the manufacturer's instructions. This Class B system conforms to NSF/ANSI 55 for the supplemental bactericidal treatment of disinfected public drinking water or other drinking water that has been tested and deemed acceptable for human consumption by the state or local health agency having jurisdiction. The system is only designed to reduce normally occurring non-pathogenic nuisance microorganisms. Class B Systems are not intended for the treatment of contaminated water.

This System has been tested according to NSF/ANSI 42, 53 and 401 for 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 and 401.

Substance	Influent Challenge Concentration	Reduction Requirements/ Max. Permissible Concentration	Product Water Concentration	% Reduction
NSF/ANSI Standard 42 Aesthetic Effects				
Particulates-Class I (MFL at 0.5 < 1 micron)	>10,000	>85%	>85	
Chlorine Taste and Odor (mg/L at 40 °C)	2 ± 10%	>50%	>85	
Chloramine (mg/L)	3 ± 10%	0.5	>85	
NSF/ANSI Standard 53 Health Effects				
Asbestos (fibres/ml > 10 µm)	10 ± 10%	>99%	>99	
Lead at pH 5 (µg/L)	150 ± 10%	10	>99	
Mercury at pH 5 (µg/L)	6.0 ± 10%	2.0	>99	
Mercury at pH 5.5 (µg/L)	6.0 ± 10%	2.0	>99	
Chloride (mg/L)	40 ± 10%	2.0	>99	
Methyl-tert-butyl ether (MTBE) (µg/L)	15 ± 10%	5.0	>99	
Radon (µCi/L)	4,000 ± 25%	300	>94	
Toxaphene (µg/L)	15 ± 10%	3.0	>99	
Microtoxin (µg/L)	0.004 ± 10%	0.0003	>95	
VOCs (µg/L) as chloroform	300 ± 10%	99	>95	
NSF/ANSI Standard 401 Emerging compounds/Incidental Contaminants				
Meprobamate (µg/L)	400 ± 20%	60	>95	
Phenyln (µg/L)	200 ± 20%	30	>95	
Atenolol (µg/L)	200 ± 20%	30	>95	
Carbamazepine (µg/L)	1,400 ± 20%	200	>95	
TCP (µg/L)	5,000 ± 20%	700	>95	
TOPP (µg/L)	5,000 ± 20%	700	>95	
DEET (µg/L)	1,400 ± 20%	200	>95	
Mesotetol (µg/L)	1,400 ± 20%	200	>95	
Trimethoprim (µg/L)	140 ± 20%	20	>95	
Iuprofen (µg/L)	400 ± 20%	60	>95	
Naproxen (µg/L)	140 ± 20%	20	>95	
Estrone (µg/L)	140 ± 20%	20	>95	
Bisphenol A (µg/L)	2,000 ± 20%	300	>95	
Linuron (µg/L)	140 ± 20%	20	>95	
Nonyl phenol (µg/L)	1,400 ± 20%	200	>95	

Test Condition: pH 7.5, Pressure: 415 kPa (4.15 bar), Flow Rate: 3.4 L/min

The following table sets forth allowable claims which can be made for drinking water treatment units that have met the requirements for VOC reduction.

Organic Chemicals Included By Surrogate Testing				
Substance	Influent Challenge Level (ppb)	Maximum Effluent	% Reduction	
Arsenic	300	1.0	>98	
Arsenic	100	3.0	>97	
Benzene	81	1.0	>98	
Carbon tetrachloride	190	1.0	>99	
Carbon tetrachloride	78	1.8	>98	
Chlorobenzene	77	1.0	>99	
Chloropropene	15	0.2	>99	
Chloropropene	110	1.7	>98	
Dichloropropane (DCP)	52	0.02	>99	
o-Dichlorobenzene	80	1.0	>99	
p-Dichlorobenzene	40	1.0	>98	
1,2-Dichloroethane	88	4.8	>95	
1,1-Dichloroethylene	83	1.0	>99	
cis-1,2-Dichloroethylene	170	0.5	>99	
trans-1,2-Dichloroethylene	85	1.0	>99	
1,2-Dichloropropane	90	1.0	>99	
cis-1,2-Dichloropropane	79	1.0	>99	
Diisobutylene	170	0.2	>99	
Endrine	53	0.59	>99	
Ethylenes	88	1.0	>99	
Ethylenediamine (EDB)	44	0.02	>99	
Heptachlorobutene (HBT)	22	0.5	>98	
Dimethylchlorosilane	24	0.6	>98	
Dichloroacetonitrile	9.6	0.2	>98	
Trichloroacetonitrile	15	0.3	>98	
Haloketones (HK)				
1,1-dichloro-2-propanone	7.2	0.1	>99	
1,1,1-trichloro-2-propanone	8.2	0.3	>96	
Heptachloro-2-propanone	25	0.01	>99	
Isobutylchloride	10.7	0.5	>99	
Hexachlorobutene	44	1.0	>98	
Heptachlorocyclopentene	60	0.002	>99	
Lindane	55	0.01	>99	
Methylochloro	50	0.1	>99	
Pentachlorophenol	96	1.0	>99	
Perchloroethene	2,45-TP (Silvex)	270	1.6	>99
Lead at pH 5 (µg/L)	150 ± 10%	10	>95	
Trimethoprim	42	1.0	>98	
1,2,4-Trichlorobenzene	160	0.5	>99	
Mercury at pH 5 (µg/L)	6.0 ± 10%	2.0	>99	
Mercury at pH 5.5 (µg/L)	6.0 ± 10%	2.0	>99	
1,1,2-Trichloroethane	84	4.6	>95	
1,1,2-Trichloroethane	150	0.5	>99	
Trichloroethylene	180	1.0	>99	
Trichloroethylene includes: Chloroform	300	15	>95	
(sumgeometrië chemisch) Bromform	300	15	>95	
1,1,1,2-Tetrachloroethane	300	15	>95	
Radon (µCi/L)	4000 ± 25%	300	>94	
Toxaphene (µg/L)	15 ± 10%	3.0	>99	
Microtoxin (µg/L)	0.004 ± 10%	0.0003	>95	
VOCs (µg/L) as chloroform	300 ± 10%	99	>95	
Xylenes (total)	70	1.0	>99	

Additional Contaminants			
Chemical	% Reduction	Influent Concentration (µg/L)	Concentration (µg/L) DL = detection limit
EPA Priority Pollutants			
Arsenite	>99.7	67.9	<DL
Arsenite	>99.7	44.9	<DL
Aldrine	97.4	14.4	0.38
Anthracene	>99.6	0.0106	<DL
Benzidine	>99.6	2.54	<DL
Benzofluoranthene	>99.3	0.224	<DL
Benzene	>99.5	0.025	>0.025
Benzol-fluoranthene	>98.7	0.316	0.0195
Benzol-h (benzene)	91.0	0.434	0.0380
Benzol-k (benzene)	98.1	0.325	0.00811
alpha-BHC	>99.6	80.6	<DL
beta-BHC	>99.6	81.4	<DL
delta-BHC	>99.6	77.8	<DL
gamma-BHC	>99.6	80.9	<DL
Bis(2-chloroethyl)ether	>99.3	0.05	>0.0492
Bis(2-chloroethyl)ether	>99.0	213	<DL
Bis(2-chloroethyl)ether	>98.3	206	<DL
Bis(2-ethyl-hexyl) phthalate	99.0	198	2
4-Bromophenyl phenyl ether	>99.1	225	<DL
Buyl benzyl phthalate	>99.4	236	<DL
2-Chloro-2-methylphenol	>99.7	171	<DL
2-Chloroethyl vinyl ether	>99.1	258	<DL
2-Chlorophenyl phenyl ether	>99.1	197	<DL
Chrysene	>99.7	0.238	<DL
4,4'-DDD	97	59.4	1.7
4,4'-DDE	>99.6	245	<DL
4,4'-DDE	>98.8	179	<DL
Dibenz(a,h)anthracene	93.4	0.324	0.0345
3,3-Dichlorobenzene	97.5	97	<DL
3,3-Dichlorobenzene	>99.6	4.89	<DL
2,4-Dichlorophenol	>98.7	161	<DL
trans-1,3-Dichloropropene	>99.9	163	<DL
Dieldrin	99.7	132	0.43
Dethyl phthalate	>99.7	197	<DL
Dimethyl phthalate	>99.8	103	0.21
Carboxyl	>98.3	511	<DL
Chlorophenol	>99.9	212	<DL
4,4'-Dibromo-1,1'-biphenyl	95.7	46.0	2.00
Guthion	>99.9	46.1	<DL
Hydrocarbons (Gasoline, Kerosene, Diesel)	>91.3	1150	<DL
Melathion	>99.0	217	<DL
Parathion	99.9	212	<DL
Non-EPA Priority Pollutant			
Aldrene	98.8	103	0.21
Carbaryl	>98.3	511	<DL
Chlorophenol	>99.9	212	<DL
4,4'-Dibromo-1,1'-biphenyl	95.7	46.0	2.00
Guthion	>99.9	46.1	<DL
Kuckersolvent (Benzene, Kerosene, Diesel)	>91.3	1150</td	

D Leistungsdaten

Dieses eSpring™ Wasserfiltersystem ist bei NSF International und der WQA registriert.

Die folgenden Produktinformationen werden hier in Erfüllung der Bestimmungen der NSF International veröffentlicht.

eSpring System Nr.: 10-0185-E
Ersatz-Filterpatrone Nr.: 10-0186-E

Funktionsbeschreibung: Das eSpring Wasserfiltersystem besteht aus einem gepressten Aktivkohlefilter für das Filtern sowie einer UV-Lampe. Der Filter besteht aus zwei äußeren Vorfiltern aus Vliesstoff und einer Schicht von gepresster Aktivkohle.

Dieses Wasserfiltersystem ist als Klassse B System gemäß NSF/ANSI 55 klassifiziert. Es ist mit einer UV-Lampe ausgestattet, die in regelmäßigen Abständen entsprechend den Herstelleranweisungen ersetzt werden muss. Dieses System wurde zur zusätzlichen bakteriellen Behandlung von bereits behandeltem Trinkwasser aus der Trinkwasserleitung entwickelt; auch für anderes Trinkwasser, das von regionalen oder städtischen Gesundheitsbehörden für den menschlichen Verbrauch freigegeben worden ist. Das System ist nur dazu konzipiert, gewöhnlich vorhandene, nicht pathogene und unschädliche Mikroorganismen zu reduzieren. Systeme der Klasse B sind nicht darauf ausgelegt, verunreinigtes Wasser zu desinfizieren.

Dieses System wurde nach NSF/ANSI 42, 53 und 401 für die Verminderung der unten aufgeführten Substanzen geprüft. Die Konzentration der aufgeführten Substanzen in Wasser, die in das System eingeführt wurden, wurde auf eine Konzentration vermindert, die den gesetzlichen Werten oder auch weniger entsprachen, entsprechend der Norm NSF/ANSI 42, 53 und 401.

Schulz	Durchschnittliche Konzentration beim Einfu	Reduktionsgarantie/Max. genehmigte Konzentration im Wasserpaket	% Reduzierung
NSF/ANSI Standard 42: Astridische Ergebnisse			
Pankreas Klass I (Aspartat-N-Aminotransferase)	>10.000	>85%	>95
Chlorgeschmack und Geruch (mg/l als Chlor)	2 < 10%	>50%	>95
Chloram (mg/l)	3 < 10%	0.5	>95
NSF/ANSI Standard 53: Gesundheitliche Ergebnisse			
Asbest (Faser/ml >10 µm)	>89%	>98%	>98
Blei bei pH Wert 6.5 (µg/l)	150 ± 10%	10	>95
Blei bei pH Wert 8.5 (µg/l)	150 ± 10%	10	>95
Quecksilber bei pH Wert 6.5 (µg/l)	6.0 ± 10%	2.0	>90
Quecksilber bei pH Wert 8.5 (µg/l)	6.0 ± 10%	2.0	>90
Chlordin (µg/l)	40 ± 10%	2.0	>90
Methyl-tert-butylether (MTBE) (µg/l)	15 ± 10%	5.0	>95
Radon (ng/l)	4000 ± 25%	300	>95
Tetrahen (ng/l)	15 ± 10%	3.0	>95
Microcystin (ng/l)	0.004 ± 10%	0.003	>95
IVOCs (µg/l) als Chlordin	300 ± 10%	95%	>95
NSF/ANSI Standard 401 für auftretende Stoffe/gelegentliche Kontaminanten			
Meprobamat (ng/l)	400 ± 80%	60	>95
Phenyl (ng/l)	200 ± 20%	30	>95
Absolut (ng/l)	200 ± 20%	30	>95
Deketon (ng/l)	1.000 ± 20%	200	>95
TCP (ng/l)	5.000 ± 20%	700	>95
TOP (ng/l)	5.000 ± 20%	700	>95
DEET (ng/l)	1.400 ± 20%	200	>95
Mesekton (ng/l)	1.400 ± 20%	200	>95
Trinethoxim (ng/l)	140 ± 20%	20	>95
Isooprofen (ng/l)	400 ± 20%	60	>95
Naproxen (ng/l)	140 ± 20%	20	>95
Estrone (ng/l)	140 ± 20%	20	>95
Bisphenol A (ng/l)	2.000 ± 20%	300	>95
Luron (ng/l)	140 ± 20%	20	>95
Nonyl phenol (ng/l)	1.400 ± 20%	200	>95
Testbedingungen: pH-Wert 7.75, Druck: 415 kPa (4.15 bar), Fließgeschwindigkeit: 3.4 Liter/min			

Die folgende Tabelle zeigt die zulässigen Ausagen für Trinkwasserbehandlungen, die die Bedingungen für VOC Reduzierung erfüllen, auf.

H Scheda Tecnica delle Prestazioni

Il Sistema per il Trattamento dell'Acqua eSpring™ è un dispositivo approvato da NSF International e WQA.

Le seguenti informazioni sul prodotto sono presentate in conformità con i requisiti di divulgazione definiti da NSF International e WQA.

eSpring - Sistema n. 10-0185-E
Cartuccia filtro sostituibile n. 10-0186-E

Descrizione funzionale: Il Sistema per il Trattamento dell'Acqua eSpring comprende un filtro a blocco di carbone attivo pressato e una lampada a ultravioletto. Il filtro è composto da due prefiltratori in tessuto non tessuto e da uno strato di carbone attivo immobilizzato.

Questo Sistema per il Trattamento dell'Acqua è certificato come dispositivo di classe B in conformità con lo standard NSF/ANSI 55 ed è dotato di una lampada a ultravioletto (UV) che deve essere regolarmente sostituita a intervalli definiti in conformità con le istruzioni del costruttore. Questo sistema di classe B è conforme allo standard NSF/ANSI 55 per il trattamento batterico supplementare dell'acqua potabile pubblica disinfettata o di acqua potabile testata per riduzione di microrganismi indesiderati ma non patogeni normalmente presenti nell'acqua. I sistemi di classe B non sono idonei al trattamento di acqua contaminata.

Questo sistema è stato testato in conformità con gli standard NSF/ANSI 42, 53 e 401, per la riduzione delle sostanze sotto elencate. La concentrazione delle sostanze indicate nell'acqua in ingresso nel sistema risulta ridotta ad una concentrazione inferiore o uguale al limite consentito per l'acqua in uscita dal sistema in conformità con gli standard NSF/ANSI 42, 53 e 401.

Schulz	Concentrazione effluente	Requisiti di riduzione/Concentrazione massima consentita in acqua predetta	Riduzione (%)
Effetti estetici standard NSF/ANSI 42			
Particoli - Classe I (<0.1 µm)	>10.000	>85%	>95
Odo e sapore di cibo (mg/l)	2 < 10%	>50%	>95
Cloramina (mg/l)	3 < 10%	0.5	>95
Effetti sulla salute standard NSF/ANSI 53			
Asbest (fibra/ml >10 µm)	10 ± 10%	>99%	>98
Bleibei pH Wert 6.5 (µg/l)	150 ± 10%	10	>95
Bleibei pH Wert 8.5 (µg/l)	150 ± 10%	10	>95
Quecksilber bei pH Wert 6.5 (µg/l)	6.0 ± 10%	2.0	>90
Quecksilber bei pH Wert 8.5 (µg/l)	6.0 ± 10%	2.0	>90
Chlordin (µg/l)	40 ± 10%	2.0	>90
Chlordin (µg/l) als Chlordin	300 ± 10%	95%	>95
Standard NSF/ANSI 401 per avvertenze/Soffeglie/geroglifici			
Meprobamat (ng/l)	400 ± 80%	60	>95
Phenyl (ng/l)	200 ± 20%	30	>95
Absolut (ng/l)	200 ± 20%	30	>95
Deketon (ng/l)	1.000 ± 20%	200	>95
TCP (ng/l)	5.000 ± 20%	700	>95
TOP (ng/l)	5.000 ± 20%	700	>95
DEET (ng/l)	1.400 ± 20%	200	>95
Mesekton (ng/l)	1.400 ± 20%	200	>95
Trinethoxim (ng/l)	140 ± 20%	20	>95
Isooprofen (ng/l)	400 ± 20%	60	>95
Naproxen (ng/l)	140 ± 20%	20	>95
Estrone (ng/l)	140 ± 20%	20	>95
Bisphenol A (ng/l)	2.000 ± 20%	300	>95
Luron (ng/l)	140 ± 20%	20	>95
Nonyl phenol (ng/l)	1.400 ± 20%	200	>95
Testbedingungen: pH-Wert 7.75, Druck: 415 kPa (4.15 bar), Fließgeschwindigkeit: 3.4 Liter/min			

Tutta questa tabella definisce le dimensioni consentite per gli apparecchi di trattamento dell'acqua potabile che abbiano soddisfatto i requisiti per la riduzione di composti organici volatili (COV).

Weiterhin hat NSF International die Wasserüberprüfung für dieses Modell auf die Reduzierung der folgenden Substanzen hin überprüft, die nicht in der Norm NSF/ANSI Standard 42, 53 oder 401 enthalten sind:

Weitere Verunreinigungen

Chemikali	% Reduzierung	Einflusskonzentration (µg/l)	Ausflusskonzentration (µg/l)	BL = Nachweisgrenze
EPA Schadstoffe				
Azofarbstoffe	>99.7	67.8	<DL	
Azophenylene	>99.7	44.9	<DL	
Aldin	97.4	14.4	0.38	
Anthracen	>99.6	0.0106	<DL	
Benzind	>99.6	2.54	<DL	
Benzolphenanthren	>99.3	0.224	<DL	
Benzol	>99.5	0.0105	0.0050	
Benzotoluolphenanthren	>99.7	0.316	0.0045	
Benzotoluolphenol	91.0	0.434	0.0390	
Benzotoluolphenol	98.1	0.325	0.00611	
Alpha-BHC	>99.6	80.6	<DL	
Beta-BHC	>99.6	81.4	<DL	
Delta-BHC	>99.5	77.8	<DL	
Gamm-BHC	>99.5	60.9	<DL	
Bis(2-chloroethyl)methan	>99.3	126	<DL	
Bis(2-chloroethyl)ether	>99.0	213	<DL	
Bis(2-chloroethyl)phthalat	>98.3	206	<DL	
Bis(2-ethylhexyl) phthalat	99.0	199	2	
4-Bromphenylketon	>99.1	225	<DL	
Butylbenzoylbenzal	>99.4	226	<DL	
4-Chloro-3-methylphenol	>99.0	258	<DL	
2-Chlorophenylether	>99.9	175	<DL	
4-Chlorophenolether	>99.1	197	<DL	
Chrysan	>97.8	0.232	<DL	
4-DDD	97	59.4	1.7	
Din-butylketat	>99.6	245	<DL	
Din-octylketat	>98.8	172	<DL	
Diphenylketon	>99.4	0.054	0.0050	
3-Dichlorobenz	>99.5	89.7	<DL	
3,3-Dichlorobenzidin	>99.6	4.89	<DL	
2,4-Dichlorophenol	>99.7	161	<DL	
trans-1,3-Dichlropren	>99.9	163	<DL	
Dieldrin	99.7	132	0.43	
Diphenoxyketat	>99.8	197	<DL	
4-Ethoxyketat	>99.8	197	<DL	
4,4'-Dichloro-1,1'-bifenile	>99.7	107	<DL	
4,6-Di-2-methylphenol	>99.3	57.4	<DL	
2,4-Dinitrophenol	>99.7	57.6	<DL	
2,4-Dinitrotoluol	>94.3	175	<DL	
2,6-Dinitrotoluol	>95.1	204	<DL	
1,2-Diphenylhydrazin	>99.0	161	<DL	
Alpha-Endosulfan	97.1	75.6	2.20	
Beta-Endosulfan	97.5	70.4	1.	