



WATER QUALITY TEST RESULTS

WHAT IS DISTILLED WATER?

Distillation is the process of separating pure water from contaminants based on differences in boiling temperature. As water boils and steam is formed, any contaminant that has a boiling point higher than the boiling point of water cannot evaporate and is left behind. The pure steam is then collected, cooled, and condensed to form distilled water. This process, based on principles of physics, mimics the natural hydrologic cycle and is the single, most effective method of water purification that covers the broadest range of contaminants.

INORGANIC CONTAMINANTS

ABOUT INORGANIC CONTAMINANTS

Inorganic contaminants are heavy metals, chemicals, and compounds which do not incorporate a carbon atom in their molecular structure. Some inorganic contaminants have high toxicity and can be found in many water supplies. The US EPA regulates the most toxic inorganic contaminants, such as lead and arsenic. Even at low levels, these contaminants can be harmful to the body over time.

INORGANIC CHEMICAL	FEED WATER CONCENTRATION (PPM)	PRODUCT WATER AFTER TREATMENT (PPM)	PERCENT % REDUCTION	INORGANIC CHEMICAL	FEED WATER CONCENTRATION (PPM)	PRODUCT WATER AFTER TREATMENT (PPM)	PERCENT % REDUCTION
Antimony	0.195	0	>99.9%	Iron	0.21	0	>99.9%
Arsenic	0.25	0	>99.9%	Lead	0.165	0	>99.9%
Barium	0.07	0	>99.9%	Magnesium	15.1	0.25	99.8%
Beryllium	0.19	0	>99.9%	Manganese	0.175	0	>99.9%
Boron	0.285	0	>99.9%	Mercury	0.0222	0	>99.9%
Cadmium	0.168	0	>99.9%	Nickel	0.18	0	>99.9%
Calcium	44.65	0.48	98.9%	Nitrate	31.65	0	>99.9%
Chloride	84	0	>99.9%	Phosphorous	0.2	0	>99.9%
Chlorine	1.55	0	>99.9%	Potassium	8.185	0	>99.9%
Chromium	0.185	0	>99.9%	Selenium	0.27	0	>99.9%
Cobalt	0.18	0	>99.9%	Sodium	82.8	0.02	99.9%
Copper	0.19	0	>99.9%	Thallium	0.19	0	>99.9%
Fluoride	3.7	0	>99.9%	Vanadium	0.195	0	>99.9%
Hardness	147.15	1.3	99.12%	Zinc	0.09	0	>99.9%

Results based on Pure Water Distillers being used in conjunction with post carbon filter.

ORGANIC CONTAMINANTS

ORGANIC CHEMICAL	FEED WATER CONCENTRATION (PPB)	PRODUCT WATER AFTER TREATMENT (PPB)	PERCENT % REDUCTION
PFOA	26	0	>99.9%
PFOS	7	0	>99.9%
Phenol	18	0	>99.9%
2-chlorophenol	14.5	0	>99.9%
2-nitrophenol	11	0	>99.9%
2,4-dichlorophenol	12.5	0	>99.9%
4-chloro-3-methylphenol	57.5	0	>99.9%
2,4,6-trichlorophenol	32	0	>99.9%
2,4-dinitrophenol	135.5	0	>99.9%
Pentachlorophenol	72	0	>99.9%
Naphthalene	13	0	>99.9%
4-nitrophenol	82.5	0	>99.9%
Benzene	9	0	>99.9%
Bromobenzene	9	0	>99.9%
Bromochloromethane	10.5	0	>99.9%
Bromodichloromethane	31.5	0	>99.9%
Bromoform	12.5	0	>99.9%
n-Butylbenzene	6.5	0	>99.9%
sec-Butylbenzene	6.5	0	>99.9%

ORGANIC CHEMICAL	FEED WATER CONCENTRATION (PPB)	PRODUCT WATER AFTER TREATMENT (PPB)	PERCENT % REDUCTION
tert-Butylbenzene	7.5	0	>99.9%
Carbon tetrachloride	6.5	0	>99.9%
Chlorobenzene	9	0	>99.9%
Chlorodibromomethane	25.5	0	>99.9%
Chloroform	575	0	>99.9%
2-chlorotoluene	8.5	0	>99.9%
4-chlorotoluene	8.5	0	>99.9%
1,2-Dibromo-3-chloropropane	71.5	0	>99.9%
1,2-Dibromomethane	11.5	0	>99.9%
Dibromomethane	6.5	0	>99.9%
1,2-Dichlorobenzene	17.5	0	>99.9%
1,3-Dichlorobenzene	16.5	0	>99.9%
1,4-Dichlorobenzene	16.5	0	>99.9%
1,1-Dichloroethane	10	0	>99.9%
1,2-Dichloroethane	11.15	0	>99.9%
1,1-Dichloroethene	4	0	>99.9%
cis-1,2-Dichloroethene	6.5	0	>99.9%
trans-1,2-Dichloroethene	10	0	>99.9%
1,2-Dichloropropane	8	0	>99.9%

Results based on Pure Water Distillers being used in conjunction with post carbon filter.

ORGANIC CHEMICAL	FEED WATER CONCENTRATION (PPB)	PRODUCT WATER AFTER TREATMENT (PPB)	PERCENT % REDUCTION
1,3-Dichloropropane	11	0	>99.9%
1,1-Dichloropropene	7.5	0	>99.9%
cis-1,3-Dichloropropane	8.5	0	>99.9%
trans-1,3-dichloropropene	9.5	0	>99.9%
Ethylbenzene	8.5	0	>99.9%
Hexachlorobutadiene	12.5	0	>99.9%
Isopropylbenzene	7.5	0	>99.9%
p-Isopropyltoluene	9	0	>99.9%
Methylene chloride	60000	5.5	>99.9%
Naphthalene	15.5	0	>99.9%
n-Propylbenzene	6.5	0	>99.9%
Styrene	1.95	0	>99.9%
1,1,2,2-Tetrachloroethane	10.5	0	>99.9%
1,1,1,2-Tetrachloroethane	9.5	0	>99.9%
Tetrachloroethene	7	0	>99.9%
Toluene	8.5	0	>99.9%
1,2,3-Trichlorobenzene	7.5	0	>99.9%
1,2,4-Trichlorobenzene	13.5	0	>99.9%
1,1,1-Trichloroethane	10.3	0	>99.9%
1,1,2-Trichloroethane	11	0	>99.9%
Trichloroethene	7.5	0	>99.9%
1,2,3-Trichloropropane	11.5	0	>99.9%
1,2,4-Trimethylbenzene	8	0	>99.9%
1,3,5-Trimethylbenzene	7.5	0	>99.9%
o-Xylene	26.5	0	>99.9%

ABOUT ORGANIC CONTAMINANTS

Organic compounds contain a carbon atom in their chemical structure. This group consists of thousands of different chemicals, many derived from the petrochemical industry. Common organic contaminants include solvents, cleaners, herbicides, pesticides, and industrial process wastes.

Because herbicide and pesticide contamination is such a common concern, we've grouped those in a separate chart.

ORGANIC CONTAMINANTS

HERBICIDE & PESTICIDE CONTAMINANTS

ABOUT HERBICIDE & PESTICIDE CONTAMINANTS

Any chemical in a category that ends in the word “cide” – as in pestiCIDE, herbiCIDE, insectiCIDE, and fungiCIDE – are chemicals that are specifically designed to kill things and are intentionally designed to be toxic.

Herbicides are designed to kill weeds. Pesticides and insecticides are designed to kill insects, mites, and other bugs.

Fungicides are designed to kill fungus, etc.

Many of these chemicals are heavily regulated because of the detrimental health effects they cause from extreme or sustained exposure.



ORGANIC CHEMICAL	FEED WATER CONCENTRATION (PPB)	PRODUCT WATER AFTER TREATMENT (PPB)	PERCENT % REDUCTION
Acetachlor	1.95	0	>99.9%
Alachor	1.85	0	>99.9%
Ametryn	1.9	0	>99.9%
Atrazine	2.05	0	>99.9%
Butylate	2.05	0	>99.9%
Cyanazine	1.95	0	>99.9%
Deethylatrazine	1.55	0	>99.9%
Deisopropylatrazine	0.7	0	>99.9%
EPTC	1.9	0	>99.9%
Ethalfuralin	1.7	0	>99.9%
Fonofos	0.7	0	>99.9%
Glyphosate	185.8	0	>99.9%
Metolachlor	1.95	0	>99.9%
Metribuzin	1.85	0	>99.9%
Pendimethalin	1.85	0	>99.9%
Propachlor	1.65	0	>99.9%
Prometon	1.8	0	>99.9%

ORGANIC CHEMICAL	FEED WATER CONCENTRATION (PPB)	PRODUCT WATER AFTER TREATMENT (PPB)	PERCENT % REDUCTION
Prometryn	1.9	0	>99.9%
Propazine	1.9	0	>99.9%
Simazine	1.85	0	>99.9%
Triallate	1.8	0	>99.9%
Trifluralin	1.95	0	>99.9%
2,4-D	11	0	>99.9%
2,4-DB	10.5	0	>99.9%
2,4,5-T	10.5	0	>99.9%
2,4,5-TP	10	0	>99.9%
Dicamba	10.5	0	>99.9%
Pentachlorophenol	60.3	0	>99.9%
MCPA	10	0	>99.9%
MCPB	11.5	0	>99.9%
MCPP	10.5	0	>99.9%
Picloram	11	0	>99.9%
Trichlopyr	11	0	>99.9%

Results based on Pure Water Distillers being used in conjunction with post carbon filter. 3rd party testing done by independent EPA certified laboratories.

BIOLOGICAL CONTAMINANTS

ABOUT BIOLOGICAL CONTAMINANTS

Biological Contaminants are living organisms such as parasites, bacteria, viruses, cysts, and spores. Of all types of contaminants, biological contaminants are the fastest acting and most dangerous.



Bacillus subtilis is used as a surrogate indicator. The removal of bacillus subtilis spores is generally recognized as an indicator of the removal of the following biological contaminants from water: K. terrigena (bacteria), the Polio and Rotaviruses, Giardia Protozoa, and Cryptosporidia Protozoa.

BIOLOGICAL CONTAMINANTS

ORGANISM	RAW WATER CONCENTRATION	PRODUCT WATER CONCENTRATION
Bacillus subtilis	1 x 10 ⁸ CFU/ML	None Detected
REMOVAL EFFICIENCY	ACTION LEVEL	TEST METHOD
99.9%	10 CFU/ML	NSF Std 62, Annex C

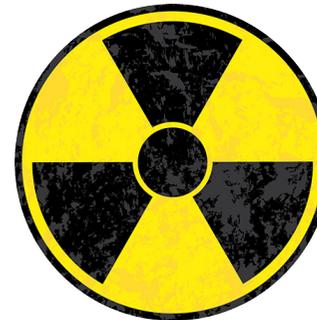
RADIOACTIVE CONTAMINANTS

ABOUT RADIOACTIVE CONTAMINANTS

Radioactive contaminants include impurities like cesium, uranium, and radium. Many people don't realize that this contamination doesn't just come from countries dumping radioactive waste; some radioactive contaminants, like uranium, often occur naturally.



Since radioactive contaminants can be dangerous to work with, we are limited in which elements 3rd party laboratories will test.



RADIOACTIVE CONTAMINANTS

RADIOACTIVE CONTAMINANT	FEED WATER CONCENTRATION	PRODUCT WATER AFTER TREATMENT	PERCENT % REDUCTION
Uranium	40.5 ± 3.19 pCi/L ± Error	0.000 ± 0.562 pCi/L ± Error	>99%
Cesium	178.9 ppb	0.4 ppb	99.8%



WHY 3RD PARTY TESTING IS IMPORTANT

We want customers to know that they can trust our test results. That's why we choose to work with independent 3rd party laboratories to ensure there is no bias in our water quality measurements.

3rd Party Independent lab results consistently prove that Pure Water distillers provide outstanding purification using Pure Water distillation systems with an activated carbon filter.

APPENDIX OF UNITS

CFU/ML = Colony forming unit/milliliter (used for reporting bacteria results)

Milligrams per Liter (Mg/L) = Parts per Million (ppm)

Micrograms per Liter ($\mu\text{g/L}$) = Parts per Billion (ppb)

Mg/L and $\mu\text{g/L}$ are the units primarily used in reporting results for water analysis.

pCi/L = Picocuries per liter, a measure of radioactivity of water

Note: The contaminants listed in these test results are not necessarily present in the drinking water of the reader.

METHODOLOGY USED

This document is a compilation of testing performed at various independent 3rd party laboratories, including the University of Nebraska Water Sciences Laboratory, Midwest Laboratories, FGL Environmental, and Harris Laboratories Inc.

All Pure Water distillation systems were set up at designated laboratory testing facilities following the manufacturer's instructions. The results show the percentage removal of the contaminant from spiked samples.

For details on the methodology of a specific test for a particular contaminant, don't hesitate to contact us at info@MyPureWater.com.

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