



MAUNAWAI® Studies

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IIREC · Dr. Medinger
Biophysical Attestation



MAUNAWAI®
Filter Technology
Long-term tests

Summary of the test series

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MAUNAWAI® FILTER TECHNOLOGY

Long-term tests

in regard to harmful and technically problematic ingredients for drinking water

Author: Walter H. Medinger; scientific director of the IIREC, a sworn and court-certified expert.

The tests were carried out by the following accredited independent and state-approved laboratories. Evaluations in a time period from 2011 to 2015:

1. Gewerbliches Institut für Umweltanalytik GmbH (GIU)
2. Labor für Umweltanalytik GmbH (UmLab)
3. WSB Labor GmbH
4. German Federal Environment Agency
5. PWU Potsdam

Object and Task

The MAUNAWAI® filter system is based on the so called PI® technology for the purification and quality improvement

of drinking water. The MAUNAWAI® filters are offered in the form of various devices:

Test series setup

The test series were carried out with original MAUNAWAI® systems which had never been in use prior to the tests. Tap water and endowed, polluted water were used for the filtering tests.

According to the instructions, the filter systems were not modified at all during the test period, i.e. the filter cartridge was not replaced, and left unchanged through all the test runs.

MAUNAWAI® Water filter system



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The Kini Jug offer naturally filtered and regenerated water for the small household. No electricity or water connection needed.

The PIPRIME systems offer – as a K2 version for soft and K8 for hard water – naturally filtered and regenerated water for the small household. No electricity or water connection needed.



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Peka PiTec

Wai

The Napui system under the sink uses 4 to 5 cartridges to reliably filter unwanted pollutants such as chlorine, heavy metals, hormone loads, drug residues and many more.

The easy-care products of the PICONNECT range offer an individual filter solution for the whole house, either individually or in series. No electricity or cleaning salts needed.

Filtering Results Overview

Remaining pollutants in percentage

Pollutants	Jug KINI / MINI	Table filter FOUNTAIN	NUI table top water filter NAPUI under sink filter
Microorganisms/Bacteria	Not measurable*	Not measurable*	Not measurable*
Legionella	Not measurable*	Not measurable*	Not measurable*
Escherichia coli	Not measurable*	Not measurable*	Not measurable*
Coliform bacteria	Not measurable*	Not measurable*	Not measurable*
Enterococci	Not measurable*	Not measurable*	Not measurable*
Lead	Not measurable*	Not measurable*	Not measurable*
Silver ions	Not measurable*	Not measurable*	Not measurable*
Chlorine	Not measurable*	Not measurable*	Not measurable*
Hormones and drugs residues	Not measurable*	Not measurable*	Not measurable*
Manganese	Not measurable*	Not measurable*	Not measurable*
Nickel	Not measurable*	Not measurable*	Not measurable*
Chromium	Not measurable*	Not measurable*	Not measurable*
Iron	Not measurable*	Not measurable*	Not measurable*
Pesticides / Herbicides	4.5 %	2.5 %	Not measurable*
Aldrin Insecticide	6.0 %	Not measurable*	Not measurable*
Arsenic	12.0 %	10.0 %	2,0 %
Copper	12.0 %	10.0 %	Not measurable*
Oils/Greases	12.0 %	10.0 %	5,0 %
Ammonium	21.0 %	14.0 %	3,0 %
Nitrate	24.0 %	11.0 %	2,0 %
Uranium	25.0 %	Not measurable*	Not measurable*
Iodine	32.0 %	26.0 %	6,0 %
Aluminium	40.0 %	36,0 %	5,0 %
Fluoride	50.0 %	20,0 %	5,0 %
Nitrite	74.0 %	17,0 %	3,0 %

Not measurable: this means that, on the day of the respective test, the quantity of pollutant to be measured in the laboratory was below the technically testable value, in each case based on the latest state of the art measuring technology. Conclusion: The pollutant quantity in the water filtered with MAUNAWAI® was no longer detectable!

Overall Evaluation

The above results are average values from the 12-month trial period. During the trial period, 3–12 liters of water were filtered daily through the MAUNAWAI® filter systems.

After 3, 6 and 12 months, respectively, we have used a special, heavily endowed test water, containing pollutants a 10 times higher than the maximum allowable concentration for drinking water. This enabled us to study the filter systems in the stress test, i.e. in case of a sudden higher contamination of the water. Thus, we were also able to test the specified change intervals of the filters, after their expiration date, for their functional reliability in the filtering result.

Overall, the MAUNAWAI® filter systems showed a surprisingly good ability to clean inorganically and organically contaminated water from a biophysical point of view. The filter system has proven to be particularly effective at removing toxic heavy metals (including uranium) as well as pesticides, drug residues and hormone-similar contaminants.

During the trial period no contamination with hazardous germs occurred.

The electrical conductivity of MAUNAWAI® filtered water is increased due to the ion exchange process in the filter. The pH of the filtered water is slightly more alkalinizing.

In addition, our institute was able to demonstrate in various tests an activation

of the biological resonance frequency of 22.5 Hertz with a positive circular polarization, which speaks in favor of an outstanding cell permeability and cell water similarity of the water filtered with MAUNAWAI®.

From the evaluation of the spectra to the resonance frequencies of 22.6 Hz and 35 Hz that we found, it can be concluded that the water filtered with MAUNAWAI® shows the hexagonal parts demonstrated by Professor Pollack and that these are, according to Professor Smith, occur in pentagonal or caduceus geometry.

Naturally, towards the end of the trial period we noted a certain slowdown in the filtering effect; however, in case of several pollutants and also with regard to the biophysical water quality very good filtering results were achieved up to the very end of the trial.

Since weakening effects during an intensive use of the filter system in practice could occur earlier than what was determined here, compliance with the change intervals recommended by the manufacturer for filter replacement is absolutely recommended.



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on a biophysical basis)

Execution

IIREC · International Institute
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