

# ELIXIR

## COUNTER TOP WATER PURIFIER MAKES ABSOLUTELY PURE WATER



The plug-in convenience requires only access to an electrical socket.

Does Elixir remove bacteria, virus, Guardia, cryptosporidium?	<b>Yes it does!</b>
Does it remove pesticides, pharmaceuticals, disinfection by-products?	<b>Yes it does!</b>
Does it remove arsenic, fluoride, uranium, plutonium?	<b>Yes it does!</b>
Does it remove smell, taste and colour?	<b>Yes it does!</b>
Does it make brackish water drinkable?	<b>Yes it does!</b>
Does it make salt water sweet?	<b>Yes it does!</b>
So it removes all contaminants from water?	<b>Yes it does!</b>
And it makes any water potable?	<b>Yes it does!</b>

### Market focus

Our water sources are contaminated with:  
 Man-made substances like *toxic chemicals, pesticides and pharmaceuticals*,  
 Natural contaminants like *arsenic, virus and bacteria*  
 Tap water disinfection treatment by-products like *chloroform*

In poor areas, millions of people die annually because of contaminants in drinking water. In rich areas lethal outcomes are few, but long term health effects are many, and often unknown.

### Target market 1

People who want a convenient solution to produce completely safe water for drinking and food preparation.

### Target market 2

Health concerned individuals who want to avoid any one or several of the many contaminants in tap water.

### Need addressed

Removal of all drinking water contaminants in a cost-effective, plug and play solution.

### Three questions to sell ELIXIR

- Do you want entirely safe water?
- How much can you spend on such safety?
- What would you say if I told you we have a counter top purifier under €500 that makes water of higher purity than any bottled water or water made by any other purification method?

## **Business opportunity**

Elixir presents an opportunity for the retail trade to offer a product for superior water purification which requires no installation, is maintenance free and fits on any standard counter.

## **Opt for the counter-top solution**

Focus tests and initial sales show customers prefer a solution which is completely safe and maintenance-free.

## **Fulfilling a growing market need**

Now supermarkets and other retail outlets can compete with established installation firms in the water purification market, which is worth billions and is growing rapidly as water sources deteriorate and people get more and more health conscious.

## **What Elixir does**

Elixir removes all non volatile contaminants such as heavy metals, radioactive particles, salt, pharmaceuticals, bacteria, viruses and parasites. It also removes volatile organic compounds (VOCs), by-products of chlorination such as trihalomethanes (THM) and radioactive gases such as radon.

Elixir is an absolute purifier. It deals with all threats to you health - even the ones in microscopic quantities. You will accomplish a complete reduction of the Body Burden from drinking water.

## **Healthy minerals**

Elixir will also remove all minerals from the water – both good and bad - and you can supplement with good minerals of your choice or buy the special Elixir Mineral Pack as one of the accessories.

## **How it works**

Pour the source water into the tank at the top of the purifier. Elixir passes the water through an advanced system of membranes. If needed, water is also boiled after treatment.

## **Maintenance**

If your water is hard, Elixir will have to be cleaned with citric acid, vinegar or the special Elixir Descaling Kit. No other maintenance is necessary.

## **Unique selling proposition**

Make drinking water in your kitchen – cheaper, purer and more convenient than bottled water – and very much more sustainable.



## WATER PURIFICATION TECHNOLOGIES

### **Activated carbon**

traps most organics  
inexpensive  
easy to install and operate  
frequent replacements

### **Water softener**

replaces calcium with sodium  
easy to install and operate  
frequent replacements  
no purification effect

### **Magnetic filters**

modifies calcium to prevent scaling  
easy to operate and maintain  
inexpensive  
no purification effect

### **Ion-exchange cartridges**

removes ions  
inexpensive  
frequent replacement of cartridges

### **Distillation**

removes almost everything  
efficient  
difficult to operate  
needs frequent maintenance

### **Ozone**

Kills bacteria Disintegrates organics  
Easy to operate  
Needs maintenance  
Creates by-products

### **High pressure reverse osmosis**

removes almost everything  
easy to operate  
efficient  
requires good maintenance and pre-treatment  
expensive  
frequent replacements

### **MEMBRANE DISTILLATION**

removes everything  
easy to operate  
dependable  
requires descaling  
no replacements

### **Cross-flow filtration**

removes silt  
inexpensive  
easy to install and operate  
frequent replacements

### **Iron filter**

removes rust  
easy to install and operate  
no purification effect

### **Ultra-violet lamps**

kills bacteria  
easy to operate and maintain  
frequent replacements  
Needs cleaning  
Creates by-products

### **Electro-dialysis**

removes ions  
easy to operate  
expensive

### **Low pressure reverse osmosis**

removes almost everything  
easy to operate  
poor performance  
frequent replacements

### **Chlorine**

Kills bacteria  
Easy to use  
Poisonous  
Creates by-products

### **Ceramic filter**

Removes silt  
Removes some organics and heavy-metals  
Easy to install and operate  
Frequent replacement

### **VAPORIZATION**

removes volatiles  
kills bacteria, virus and parasites  
easy to operate  
no replacements

- Elixir contains both Membrane Distillation and Vaporization and therefore unlike all other competitors removes all known contaminants
- Better price performance than installed devices or cartridge based purifiers
- More convenient: requires no installation or maintenance!

## TYPICAL TEST RESULTS FOR ELIXIR

Type of contamination	Amount	Result	Method	Detection level	Test by
Bacteria	14 000 (after 7 days)	0	Membrane filter count	-	National Bacteriologic Laboratory, Stockholm
Chlorine	3.4 mg/l	0	Photometric analysis (Perkin Elmer)	< 0.01 mg/l	Water Protection Ass of South West Finland
Salt water	31 000 ppm	0	Ion chromatography	< 1 ppm	VBB Viak Stockholm
Trihalomethanes	1 000 µg/l	0	Gas chromatography	< 1 µg/l	University of Turku, Finland
Radon	380 Bq/l	0	Alfa detection	< 4 Bq/l	Swedish Radiation Protection Institute
Cesium Strontium Plutonium Radium	2.4 Bq	0	Lithium Drifted Germanium Detector	< 0.1 Bq	Radiation Physics Department, Univ of Lund
Arsenic +3	10 mg/l	0	AAS Graphite	< 0,003 mg/l	Analytica AB, Stockholm
Arsenic +5	10 mg/l	0	AAS Graphite	< 0,003 mg/l	Analytica AB, Stockholm

### Justification of tests

Since the ions contained in salt water and the radioactive ions, which have been included in the test program, are smaller than 0.001 microns (one micron is 0.000001 meter) and thus smaller than any other types of particles, the tests conducted with salt water and radioactive ions prove that all types of particles are removed.

Tests with bacteria have been conducted to control that live organisms do not behave differently in the process compared to other matter tested. Bacteria are around 1 micron in size. There are known smaller living organisms. Virus, for instance, are as small as 0.01 micron. However, not even unknown organisms can be smaller than an ion. An ion consists of one or several atoms. Therefore all microorganisms are always removed.

Chlorine, trihalomethanes and radon are gases commonly found in drinking water - the former in municipal water and the latter in well waters. Total removal of these gases implies that all gases are removed completely.

### Total efficiency

All gases (or any volatile matter) will be removed in the same way and all material (or any non-volatile matter) will be removed. And there is no other type of matter than volatile and non-volatile. Therefore we can say: whatever contaminants there are in your drinking water, be they microbes, disinfection by-products, chemicals, pesticides or pharmaceuticals - they will be removed.

### Detection levels

The contracted laboratories have used state-of-the art measuring methods. Even though all test results are zero, i.e. below the detection level (measuring capacity) of the equipment presently used, there may be some undetected traces of the tested elements in the purified water. As soon as more sophisticated test methods appear on the market, new tests will be made.

## Product Purpose

Installed devices often present considerable practical and financial barrier for consumers. Purity has developed a practical way to purify water so as to effectively remove all contaminants and produce high quality drinking water. We also address concerns about the environmental and health risks associated with bottled water. As prolonged water-plastic contact can release harmful substances into water, our product comes with a stainless steel accessory pack including a single servings drinking bottle, enabling consumers to enjoy the benefits of bottled water without the expense or risk from long term storage in plastic containers.

## Main features:

- Unique patent protected membrane distillation technology
- Unique patent protected electronics: vaporizing, timer, reheat options
- Designed accessory packs: pitcher and drinking bottle, minerals pack, descaling kit, and other options

## Unique selling points

**Security:** scientifically developed and tested to bring security of end product

**Performance:** removes all harmful contaminants

**Convenience:** plug in, counter top simplicity. No maintenance.

**Sustainability:** Replaces expensive bottled water.

**Economy:** No replacement filters and no service needed.

## About the Company

HVR Water Purification AB (publ) was founded by SCARAB DEVELOPMENT AB ([www.scarab.se](http://www.scarab.se)), a Swedish private development company that develops proprietary technology for water purification and creates projects for increasing the supply of high quality water. Scarab has developed world leading technology in several areas including Solar and Waste Heat Desalination, Co-Generation of electricity and water, Polygeneration, Arsenic removal, Zero Liquid Discharge and Ultra Pure Water (UPW) for industrial use.

Contact: [info@hvr.se](mailto:info@hvr.se), [www.hvr.se](http://www.hvr.se)

## Specifications

**Materials:** Stainless steel, polypropylene (PP) and polytetrafluorethylene (PTFE)

**Feed water tank:** Maximum 4,5L min 2,0L

**Tank purified water:** 3L

**Power MD:** 230 V ~ 50 Hz/1000W

**Power Vaporizer:** 230 V ~ 50 Hz/1800W

**Total dimensions:** 240x420x500mm

**Weight:** 12Kg

**Power cord:** 1.2 meters

**Patent protection:** Four international patents

### Retail Price

Target range: € 400 - 600