Uranium Removal

URANIUM IN YOUR DRINKING WATER
(Point Of Use Cartridge)

URANIUM in your drinking water is harmful to your health. Watch® Water suggest that drinking water with uranium levels above 30 ppb should have a "Point Of Use" filter at every home to minimize the risk of kidney malfunction. Exposure to uranium in drinking water has shown many harmful diseases. You should not continue to drink water contaminated with excessive levels of uranium. Unique is affordable home water treatment "Point Of Use" filter that produces 5 to 6 gallons (19 - 23 liters) of uranium and radium free drinkable water per hour and remove 95 - 100% of uranium. More information on next pages or at http://www.watchwater.de home page.

Unique Water or Uranium?

Your Household Quality Filter

Instructions:
Periodic maintenance of the treatment systems as instructed by Watch® Water is recommended to ensure proper function and safety.
UNIQUE Head: 3/8" inlet/outlet with John Guest fittings for UNIQUE Filter Cartridges. UNIQUE head connector is designed to fit a range of Watch® Filter cartridges for all food and beverage applications (Drinking water dispensers, Under Sink, Ice Machines etc.)

UNIQUE Quick Change Cartridges:
UNIQUE Cartridge contains a very innovative, Patented adsorbent, based on granulated Barium Sulfate (Trade name BAROSORB®) which has been developed as a long testing, high capacity and thus lowering costs associated with removing uranium from water. Its durability and selectivity for uranium means that UNIQUE Cartridge is absolutely reliable and efficient to remove uranium for safe drinking water at home, office and restaurants at any places in the world.

MORE INFORMATION:
UNIQUE Quick change technology means there is absolutely no need to shut off any water supply and UNIQUE filter can be changed in just seconds. It has no by pass, that means 100% uranium free filtered water.

More information on Watch® UNIQUE FILTER:
- Low operating cost
- Long lasting
- Very high capacity
- Proven technology
- Patented technology
- No fines
- No backwash
- No odor
- No pH drop
- No pressure drop

DRINKING WATER AND HEALTH
UNIQUE FILTER contains NO Anion or Cation Resins

Ion exchange (IX) can consist of anion exchange (AX) or cation exchange (CX). IX achieves the selective removal of charged inorganic materials from water using an ion-specific resin. As water containing undesired ions passes through a column of resin media, charged ions on the resin surface are exchanged with the undesired ions in the water. In a large centralized treatment system, the resin is regenerated and a regenerant waste stream is discharged. For POU units, the resin is replaced periodically as opposed to regenerating.

Resin fouling may occur if influent water has high concentration of total suspended solids, iron, magnesium or copper. Channels may develop in the resin bed if the pressure drop across the bed is too high due to fouling. These channels may permit water to pass through the unit without adequate contact with the treatment resin. Since POU ion exchange units cannot be backwashed, the media life of these devices may be shortened when level of these solids, iron, magnesium or copper are high, and may preclude the use of these devices.
Introduction:

Groundwater is favored as a source of drinking water in many countries. Water coming from the subsurface is often thought to be cleaner and easier to treat as compared to surface water and as a result of which, many wells have been either dug or drilled. However, besides the risk of being contaminated by anthropogenic pollution, ground water naturally contains several chemical components, which can lead to different kinds of health problems. According to Reimann and Banks (2004) a groundwater source can potentially contain several naturally occurring chemical elements, many of which are not tested routinely as indices of water quality despite their known toxicity. Uranium and its daughter product Radon are two naturally occurring elements that can lead to health problems if present in high concentrations in groundwater. Countries that have problems with natural radioactivity in their water include Sweden, Finland, Norway, USA, Canada, India, Iran and Brazil among many other countries.

Uranium:

Uranium exists as three isotopes: $^{238}\text{U}$, $^{235}\text{U}$ and $^{234}\text{U}$. The first two isotopes have their own decay series while the third one is an intermediate product of $^{238}\text{U}$ decay series. Due to its high abundance in total natural Uranium 99.28% by weight (Wilkening, 1990), $^{235}\text{U}$ is the isotope of interest and in addition it is the parent element of the most frequently studied isotope of radon, $^{222}\text{Rn}$. Uranium is radioactive and undergoes a series of decay steps until it reaches a stable state, whereby lead ($^{206}\text{Pb}$) is the final product. In the decay series, radiation is emitted in the form of alpha particles ($\alpha$), beta particles ($\beta$) as well as gamma rays ($\gamma$) and intermediate daughter products are also formed.
The life cycle of Watch® UNIQUE Cartridge:

Each UNIQUE Cartridge last about 4000 gallons (15000 liters) which is approximately 12 months for an average family. After that they must be replaced, and an entirely new filter is inserted into the quick change head. UNIQUE Cartridge have an indefinite shelf-life. Rebecca® Filter has decided to collaborate with Watch® Water to create a 100% recyclable cartridge. Watch® Water offices are shown on Watch Water website. All products are recycled as per regulations but product itself will never be used again for any filtration.

Social Implications of Watch® Water:

The Watch® Water has engaged itself to design very economical filters to donate to very important charities all over the world who are supporting poor people to have access to clean drinking water without Uranium, Arsenic, heavy metals and many more harmful contaminants. To know more about Cartridge to Donate please visit our website www.watchwater.de

Features & Benefits:

- **Affordable**: The most advanced and affordable water filter available in the market.
- **Simple to use**: Install the Head, insert the cartridge into the filter head and rotate clockwise ¼ turn.
- **Quick Payback**: The QUICK filters UNIQUE, SPECIAL or TITAN will replace the need of bottled water at home, office and restaurants and you will see savings immediately.
- **Long Service Life**: All filter are made of very high capacity adsorbents like BAROSORB®, FILTERSORB® and TITANSORB® which can remove impurities many times longer than any ion-exchange resin or Reverse Osmosis available in water treatment industry.
- **High Quality**: You will see the difference.

Notice:

1. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
2. For cold water only.
3. Replace cartridge when rated flow becomes too slow and contact your local dealer or place where you purchased.

Distributed by:

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>Tel</th>
<th>Fax</th>
<th>URL</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fahrlachstraße 14</td>
<td>+49 621 87951-0</td>
<td>+49 621 87951-99</td>
<td><a href="http://www.watchwater.de">http://www.watchwater.de</a></td>
<td><a href="mailto:info@watchwater.de">info@watchwater.de</a></td>
</tr>
</tbody>
</table>

Manufactured by:

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>Tel</th>
<th>Fax</th>
<th>URL</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fahrlachstraße 14</td>
<td>+49 621 87951-0</td>
<td>+49 621 87951-99</td>
<td><a href="http://www.watchwater.de">http://www.watchwater.de</a></td>
<td><a href="mailto:info@watchwater.de">info@watchwater.de</a></td>
</tr>
</tbody>
</table>

Watch®’s Quick Change Filters can be coupled together to assure the best quality filtration available for your drinking water!