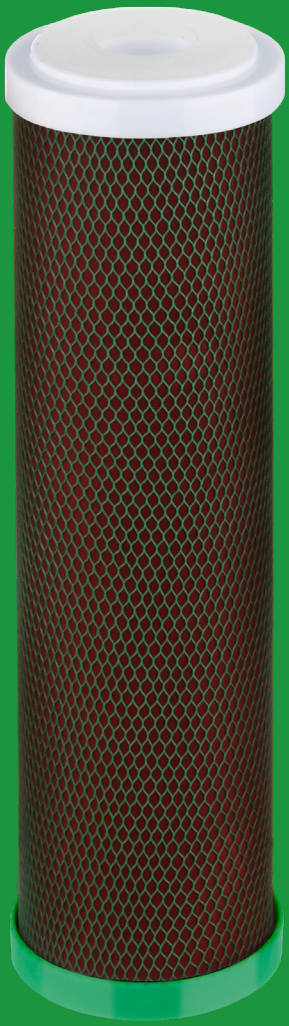
# GEYSER

water filters



# ARAGON ULTRA

Ion-exchange polymer filter cartridge
for comprehensive water treatment

OPERATION MANUAL

**Thank You for purchasing one of the Geyser products!**

Our know-how and technologies provide the immaculate quality of water in Your house.

## APPLICATION

Aragon cartridge (Patent No 2318577) is designed for the comprehensive treatment of cold and hot water by removing suspended solids, iron, manganese, heavy metals, chlorine, organic compounds and reducing hardness salts.

Water after filtration can be drunk without boiling. It retains a useful level of mineralization, the water becomes healthier: calcium in its composition passes into the aragonite form, which is well absorbed by body. Combining several types of filtering materials, Aragon Ultra 10 SL water purification cartridge purifies using 4 methods: sorption, ion exchange, mechanical filtration of solid particles and disinfection thanks to the Electrosorb effect.

The cartridge has a standard 10" size.

## MATERIAL

A special technology is used for manufacturing of Aragon filtration material (Patent No 2318577) from the unique ion-exchange microporous polymer combined with silver as a bacteriostatic agent. Suspended solids such as rust, sludge, and sand settle mainly on the outside surface of the material. Compounds of iron, aluminum, lead, radioactive elements and other dissolved contaminants are removed by the ion exchange process. The internal absorbing surface captures chlorine, organic compounds, petroleum products and other harmful impurities. Due to the quasi-softening effect the crystal structure of hardness salts (calcium carbonates) transforms into its aragonite form (Patent 2286953), which reduces scale build-up and enriches water with the healthy calcium – Aragonite.

## ARAGON'S BENEFITS

- Comprehensive water treatment (3-in-1) – combination of microfiltration, ion exchange and sorption in one filter element;
- Bacteriostatic effect - unwashable metallic silver in the cartridge prevents reproduction of the filtered out microorganisms;
- Self-indication - reduction of filtered water flow is a signal for replacement or regeneration of the cartridge.
- Regeneration – home-made recovery of the cartridge's filtering properties allows to use it multiple times (see "Regeneration");
- Anti-discharge – all captured contaminants are irreversibly blocked inside the labyrinths of the cartridge structure;
  Quasi-softening – the property of Aragon to modify the structure of hardness salts into the easily absorbed healthy form of calcium – aragonite;

The operation temperature from +4 to+75°C allows to use this material for both cold and hot water treatment.

## ARAGON ULTRA FOR COMPLEX WATER TREATMENT

## CAPACITY AND PORE SIZE

Porosity — up to 0.05 μm.
Module capacity — 2 l/min.
Resource — up to 10,000 l

## CLEANING AND REGENERATION OF CARTRIDGE

Abrupt reduction of the filtered water flow is a signal for replacement or regeneration of the cartridge.

### MECHANICAL CLEANING

Detach the filter sump with a wrench and unscrew the cartridge. Clean its surface with a soft brush (e.g. fabric) under water. If there is a mineralizer or a carbon block, unscrew the bottom plug with a special wrench and remove the mineralizer or the carbon block, screw the plug in and clean the cartridge surface.
There are 2 steps of regeneration:

### 1. CLEANING FROM IRON AND HEAVY METALS (after mechanical cleaning)

In an enamel or glass ware make 3 litres of 3% lemon acid solution (30 g or 2 tablespoons per 1 litre of water).
Place the Aragon cartridge in a sink or a container and pour the solution inside the cartridge through its neck by portions until the flowing out solution becomes totally clear. Then pour clean water inside the cartridge and let it drain.
Prepare 0,6 litre of 2% soda solution (1 teaspoon per 0,6 litre). Place the Aragon cartridge in the housing and pour the prepared solution through its neck until it fills up the cartridge and housing. In an hour, pour out the solution and assemble the filter in the reverse order. Open the filtered water tap on and let it run during 5 minutes. Now Your filter is ready to work!

### 2. CLEANING FROM HARDNESS SALTS (after mechanical cleaning)

In a 1,5-2 litre container add 40 g of citric acid, 30 g (2 teaspoons) of baking soda and pour 1 litre of water. Water must be added in several portions because of the foaming (releasing of carbon dioxide) in the process of cleaning. Place the cartridge in the housing and fill it with the prepared solution (approximately 0,6 litre). Leave it for 10-12 hours, then remove the cartridge and pour out the used solution. Place the cartridge upright in a sink and rinse with the left solution by pouring it through the threaded neck, and let it drain.

Flush the left solution out of the cartridge in two steps. First, flush the cartridge out with 3 litres of water by pouring it in portions through the threaded neck of the cartridge. Then, wrap the neck with a plastic film and fix it with a rubber band or a string. Turn the cartridge upside down and unscrew the bottom plug with a special wrench. Place it in this position in the sink and flush 3 litres through it as described above. Remove the film and screw the bottom plug. Assemble the filter in the reverse order. Turn the filtered water tap on and let it run during 3 minutes with a flow rate 1-1.5 L/min.

## NOTICE

The hermetically sealed package is required to keep Aragon cartridge wet. The damage to the package may cause drying and cracking of the cartridge, which makes it unusable. Keep the cartridge away from low temperatures, direct sunlight and prevent it from falling and hitting.

Disposal must be done in accordance with the sanitary, ecological and other requirements of the national environment protection standards.

**Storage period unless the package is opened or damaged is 3 years at the temperature of 5-25°C.**

**TU 3697-023-48981941-2014**
Certification is not mandatory.

**MANUFACTURED BY AKVATORYA, LTD.**

## WARRANTY CARD

Date of issue

To be filled in by the seller

Date of Sale _____

Store's stamp _____

0525