

## FILTERS

Physical dirt and other particles are cleansed by circulating the water from the pool through a filter. For our smaller hot tubs, we have a light cartridge filter, as well as a more efficient mass filter that uses either filtration sand or Kirami filter fibers. Depending on the type of filter, the same water can be used for up to two weeks or even two months. However, the elimination of bacteria and micro-organisms should always be taken care of separately using chemicals.

### CARTRIDGE FILTER FOR THE POOLS EDGE

**SI2000** is a nifty filter that uses a lamella filter cartridge, you can hang the filter on the edge of the tub with a hanger designed for Kirami hot tubs. The water is first absorbed through coarse filter and then into the filter cartridge under water. The clean filtered water returns to the pool through the pump located at the bottom. The filter recycles 2000 litres per hour. During use, the filter also mixes the water in the tub. The filter allows the same water to be used for up to two weeks.



### EXTERNAL CARTRIDGE FILTER

**CF23** is an external cartridge filter system suited for Kirami hot tubs and filters bathing water efficiently. It is built as one piece where the integrated pump is below, and the cartridge tank and turn connector are on the top. The suction side has a coarse prefilter for bigger debris that protects the pump. Thanks to the cartridge filter, the same water can be used for up to two months. For connecting to the pool, you will need a pass-through/hose set suitable for your pool, which needs to be purchased separately according to the hot tub model. The system itself has connectors for 38 mm inside diameter hoses.



### MASS FILTER FOR HARDER USE

Our high-quality Mass filter **MF250**, suitable for small pools and hot tubs, cleans the water from dust, leaves, impurities caused by bathing and other dirt. Impurities get stuck in the filtration mass where they remain until cleaning. For filtration you can use either traditional filtration sand or Kirami filtration fiber. Thanks to the mass filter, the same water can be used for two months or even longer.



The package includes Base, 250 W pump, 4-way control valve, hose between pump and valve, filtering tank and 500 g of Kirami filter fiber. You will need a connection / hose kit to connect the filter onto your hot tub, these are sold separately and can be different according to the hot tub model.

	SI2000	CF23	MF250
Suitability	Kirami hot tubs	Kirami hot tubs	Kirami hot tubs and small swimming pools.
Filtering method	Filter cartridge	Filter cartridge	Filter sand / Filter fibre
Filter area	0,2 m <sup>3</sup>	2,3 m <sup>3</sup>	-
Water circulation	2 m <sup>3</sup> per hour	4,4 m <sup>3</sup> per hour	7,5 m <sup>3</sup> per hour
usage time of the same bathwater	Up to 2 weeks	1-2 months	more than 2 months
Hose outputs:	No hose	38 mm inner diameter hose	32- or 38-mm inner diameter hoses
Washing:	The cartridge can be washed and rinsed with running water and by using BioCool clean my pool filter.	The cartridge can be washed and rinsed with running water and by using BioCool clean my pool filter.	The filter mass can be washed and rinsed using the Backwash and Rinse function of the filter. If necessary, the filter mass should be changed to a new one.
Accessory:	Replacement cartridge	Replacement cartridge	Filter fibre / filtrations sand
Coupling:	Only a fault current protected socket.	Only a fault current protected socket.	Only a fault current protected socket.

## FILTRATION MASS AND OTHER ACCESSORIES

### KIRAMI FILTER FIBER 500 g

The filtration masses designed for use in the mass filters are intended for filtering water in pools by circulating water through the filtering equipment. The masses are suitable for all mass filters, including larger swimming pool filters. The fiber is compatible with all pool chemicals and it doesn't harden like sand. Replace yearly. The Kirami filter fiber replaces traditional filtration masses such as sand.

The fiber is a cotton-like mass that is light and easy to transport, it ensures an excellent filtration power. One 500 g filter fiber bag is the equivalent of 19 kg filtration sand. The fiber can be disposed of as energy waste.



### FILTRATION SAND 25 Kg, 0,7-1,4 mm grain

Kirami's filtration sand is washed, and specifically intended for pool water filtration. It's a traditional and reliable filtration material, which is commonly used with mass filters to clean the pool. You must remember to clean the mass filter enough, at the latest when the pressure starts to increase. Washing is carried out by the filters backwash program. The sand is recommended to be changed every season, but at least every two years.



The filtration mass or sand can be washed by backwashing when the filtration pressure increases. The cartridge of the hang on filter (SI2000) and the external cartridge filter should be washed regularly, so in addition to the cartridge that comes with the filter, it is advisable to get a spare cartridge so that one can be used while the other cartridge is drying out after washing it.

### LEAD-THROUGH SET TO PLASTIC HOT TUBS

You will need a connection / hose kit to connect the filter onto your hot tub, these are sold separately and can be different according to the hot tub model. You can familiarize yourself beforehand on how to install the lead-through on our website <https://www.kirami.fi/en/accessories/water-hygiene/connectors-and-hoses/hose-kits>



### KIRAMI MIDDLE OUTLET KIT

Installing a middle outlet kit between the heater and the tub may help you place the tub on a terrace, as the water drainage can be moved to the same side as the heater. The middle outlet kit is available for plastic tubs.

The kit contains all the parts you need to install an outlet valve between the heater and the tub. The product does not include a Kirami outlet valve; the outlet valve included with the hot tub is moved to the middle outlet. The tub's discharge pipe is closed with a plug provided with the kit. Distance between the heater and tub will be 36 cm after installing the kit.



Watch a how-to video about installing a filter in connection with the terrace.



### OTHER ACCESSORIES

Kirami has a lot of handy accessories, such as a debris net with a short telescopic pole, a tablet dispenser, a mixing paddle and last but not least detergents to help keep the water fresh and clean.

## ADDITIONAL TIPS FOR WATER SANITATION

Your bathing water will stay cleaner if you take these things into account:

- Add the necessary water treatment agents in good time. BioCool regularly up to 12 hours before bathing. The chlorine-based cleaner works in a much shorter time.
- Take care of your own cleanliness. Impurities like for example various cosmetic substances such as skin creams, hairspray, etc. can cause the water to foam.
- Use the filtration equipment. It keeps the water moving, filters impurities and saves water. It is advisable to purchase the filtration equipment at the same time you order your hot tub, so that the installation holes are already made in the factory.
- Pay more attention to water hygiene during warmer periods, as the bacteria thrive in heat. Normally using a sand filter and chemicals, you can bathe using the same water throughout the summer.
- To prevent algae from forming, always keep a lid on the hot tub when it's not in use. This way UV-light can't accelerate the growth of algae. The lid is also a good debris protector!

The best bathing experience starts with clean water



WATER HYGIENE



# WATER TREATMENT PRODUCTS



## HOW TO KEEP YOUR BATHING WATER CLEAN

### WATER CLEANLINESS CONSIST OF TWO SECTORS

1. Maintaining the purity of the water with a filtration device.
2. Eliminating bacteria and micro-organisms with the help of water treatment chemicals.

There are different methods for chemically cleaning hot tub water, the suitability differs for these methods depending on conditions and the user's own needs.

### When you want water treatment to be as easy as possible

Biocool is suitable especially when you use water from the water supply network, which can't be replaced after every use and there is no need to bathe immediately. We don't recommend using Biocool when using sea-, lake or natural water.

Biocool offers simple, efficient and gentle products for water sanitation, they are safe for both people and the environment. Biocool is involved in the fight to reduce use of chlorine and antibiotics for water treatment.

**BIOCOOL**  
MADE IN SWEDEN

### Biocool Disinfect my pool

An easy and effective liquid water cleaner.

- Odourless and biodegradable.
- Completely chlorine free, i.e. free of chlorine compounds that are harmful to health.
- The product works at various pH values without losing effectiveness.
- Easy to dispense directly from the bottle with the help of a dispenser.
- Replaces chlorine, shock chlorine, algaecides and pH measurement and adjustment.



### Biocool Clear my pool water

Flocculating agent.

- Especially designed for tubs with a filter system.
- Helps to remove small particles that cloud water in the pool.
- Particles that are too small for the filter are toasted with makes it possible to filter them too
- Be sure to wash the filter cartridge regularly with Biocool Clean my poolfilter and the entire filter with Biocool Shock my spa system.



### Biocool Clean my pool filter

Filter cartridge cleaner.

- Biocool Clean my poolfilter cleans the filter cartridge by dissolving, without abrasion.
- Removes dirt and harmful microorganisms such as bacteria and parasites.
- Regular cleaning of the filter cartridge ensures good water quality in the pool.



### Biocool Shock my spa system

All-round cleaner for the pool, both for the hose and pipe system.

- Recommended to use 3-5 times a year before changing the water.
- Reduces the formation of biofilm and layers, which improves the bath water quality.
- One 1000 g jar is enough for a 1000 litre water system.
- Environmentally friendly, chlorine-free and easily degraded in the nature.



## HOW TO USE BIOCOOL WATER TREATMENT PRODUCTS

### Biocool Disinfect my pool

Biocool's Disinfect my pool cleaner works with all pH values: so there is no need to measure or adjust the pH or chlorine values of the water. Disinfect my pool is suitable for use in hot tubs and hot tubs filled with tap water.

### WATER PURIFICATION

Dispense Biocool Disinfect my pool cleaner with 120 ml/1000 liters to water. Wait 12 hours before bathing, as the product needs time to mix and make the bacteria harmless. If you are using a filter, make sure to renew the filter with a clean filter cartridge or clean the filter using the rear rinse while the filter system is on. If there is no filter, it is a good idea to mix the water on a regular basis, with a mixing paddle, for example.

### CLEANING OF THE HOTTUB, HOSE AND PIPE SYSTEM

Use Biocool Shock my spa system 3-5 times a year before changing water to prevent the formation of biofilm and layers.

### MAINTENANCE

Disinfect my pool cleaner 40 ml/1000 l to water after each bath day and otherwise 40 ml/1000 l to water is applied in filtered pools every 7 days from use. In tanks without a filter, use the same water for 1 to 2 baths when 40 ml/1000 l to water are applied after each bath.

**USE BIOCIDES SAFELY. ALWAYS READ THE LABELS AND PRODUCT INFORMATION BEFORE USE.**

**NO BIOCOOL WATER MANAGEMENT PRODUCT HAS CHLORINE COMPOUNDS THAT RELEASE ACTIVE CHLORINE AND THEREFORE DOES NOT PRODUCE CHLORAMIDES THAT ARE HARMFUL TO HEALTH.**

## IS YOUR WATER IN BATH CONDITION?

WHAT DOES THE WATER LOOK LIKE?	FAULT	SOLUTION CHLORINE	SOLUTION BIOCOOL
Green and cloudy water	Algae crop	<ul style="list-style-type: none"> <li>• Adjust pH.</li> <li>• Shock treat the water with the right chemicals.</li> <li>• Use algaecide.</li> </ul>	Use <b>Disinfect my pool</b> cleaner and algaecide.
Slimy pool edges	Algae crop	<ul style="list-style-type: none"> <li>• Adjust pH.</li> <li>• Shock treat the water with the right chemicals.</li> <li>• Use algaecide.</li> </ul>	Use <b>Disinfect my pool</b> cleaner and algaecide.
Milky and cloudy water	Hard water. There is lime in the water. There is not enough disinfectant in the water.	<ul style="list-style-type: none"> <li>• Adjust the pH value.</li> <li>• Shock treat the water with the right chemicals.</li> <li>• Add more water clarifier.</li> <li>• Start the pump.</li> </ul>	Use <b>Disinfect my pool</b> cleaner and <b>Clear my pool-water clarifier</b> and start the pump.
The water is clear, but it is green in colour. Brown water usually means residues of copper or iron in water.	There's iron residue in the water. (Yellow-brown colour). Copper residues in water (turquoise colour).	<ul style="list-style-type: none"> <li>• Adjust the pH value.</li> <li>• Shock treat the water with the right chemicals.</li> <li>• Add more water clarifier.</li> <li>• Let the pump run continuously.</li> </ul>	Use <b>Disinfect my pool</b> cleaner and <b>Clear my pool-water clarifier</b> and let the pump run continuously.
The water is brown and cloudy.	There is iron in the water.	<ul style="list-style-type: none"> <li>• Adjust the pH value.</li> <li>• Shock treat the water with the right chemicals.</li> <li>• Add more water clarifier.</li> <li>• Let the pump run continuously.</li> </ul>	Use <b>Disinfect my pool</b> cleaner and <b>Clear my pool-water clarifier</b> and let the pump run continuously.
The water is black.	There is manganese in the water.	<ul style="list-style-type: none"> <li>• Adjust the pH value.</li> <li>• Shock treat the water with the right chemicals.</li> <li>• Add more water clarifier.</li> <li>• Let the pump run continuously.</li> </ul>	Use <b>Disinfect my pool</b> cleaner and <b>Clear my pool-water clarifier</b> and let the pump run continuously.
There is a rough layering on the edges of the pool.	Layers of lime caused by hard water.	Remove the layers.	Remove the layers.
The water's foaming.	Surfactants entering the water through detergents, like soap and skin care products.	Thorough rinsing of the bathing suits and shower before bathing.	Wash filters and pipes with <b>Shock my spa</b> cleaner.

## HOW TO USE CHLORINE-BASED WATER TREATMENT PRODUCTS

### MEASURING

The first phase of water treatment is measuring the pH and chlorine value. Measuring the pH value is made easy by using Kirami's test strips. Dip the strip horizontally in the filled hot tub and compare the strip with the colours of the model in the jar. A more accurate measurement of the pH and chlorine value is made by using the pooltester.

### pH LEVEL ADJUSTMENT

The ideal pH value is between 7,0 and 7,4. You can adjust the pH of the water using pH+ or pH- granules.

### WATER PURIFICATION

To prevent bacteria and spores reproducing shock treat your water, and then continue disinfection.

## USEFUL TIPS

### ALGAECIDE

Warm water and sunshine create a favourable environment for algae and bacteria to grow on the pool walls. Algaecide prevents algal blooms and is recommended to be used especially on hot summer days. Algaecide can be used with both chlorine based and Biocool products.

### WATER CLARIFIER

Small particles of dirt may get through the filtration system, making the water in the hot tub look discoloured or cloudy. With the help of Kirami's Water Clarifier, small impurities can be precipitated to better filter them out of the pool. It is recommended to use chlorine-based water treatment products.

Substances in the form of grain should always be mixed first with water in a bucket. The dissolved grains are then mixed with the water in the hot tub.

The tablets are always placed in a separate floating dispenser, from which the tablets dissolve evenly in the water. The dispenser has to float freely in the hot tub.

For dosing, you can check the water volume of Kirami's pools on Kirami's [www.kirami.fi/en](http://www.kirami.fi/en) instructions can be found on the product labels.



## CLEAN THE HOT TUB AND HEATER WITH THESE

### KIRAMI BIOWASHING, concentrate 5 l

Biodegradable, Finnish degreasing and detergent combination for removing all kinds of dirt from painted and unpainted surfaces. Kirami Biowashing detergent efficiently removes even difficult dirt and gives it a fresh result. Available in 5-liter canisters.



### KIRAMI BIOWASH, spray 0,5 l

The Finnish Kirami Biowash spray is biodegradable and pre-diluted easy to use. Biowash, which is sprayed on the washable surface, it's suitable not only for hot tubs, but also for washing saunas and sanitary facilities. The substance removes even difficult dirt and is therefore also suitable for degreasing.



### KIRAMI SOOTHWASH, spray 0,5 l

Kirami Soothwash removes even the hard stuck grime. Spray the surface you're going to wash. Works even on difficult dirt in a few minutes. The substance can be used to remove sooth and severe dirt from, heaters, fireplace and furnace.



Be sure to wash the heater in springtime before use!



Warmer feelings.

[www.kirami.fi/en](http://www.kirami.fi/en)



Kirami resellers:  
[www.kirami.fi/en/jalleenmyyjat](http://www.kirami.fi/en/jalleenmyyjat)