USER MANUAL

SYDROS HYDO-Klar2O WATER FILTER

Designed and developed in Germany

Filter technology MADE IN GERMANY

Top Most innovative Food Technology 2024

20 Startup Awards for Klar2O

Patented worldwide

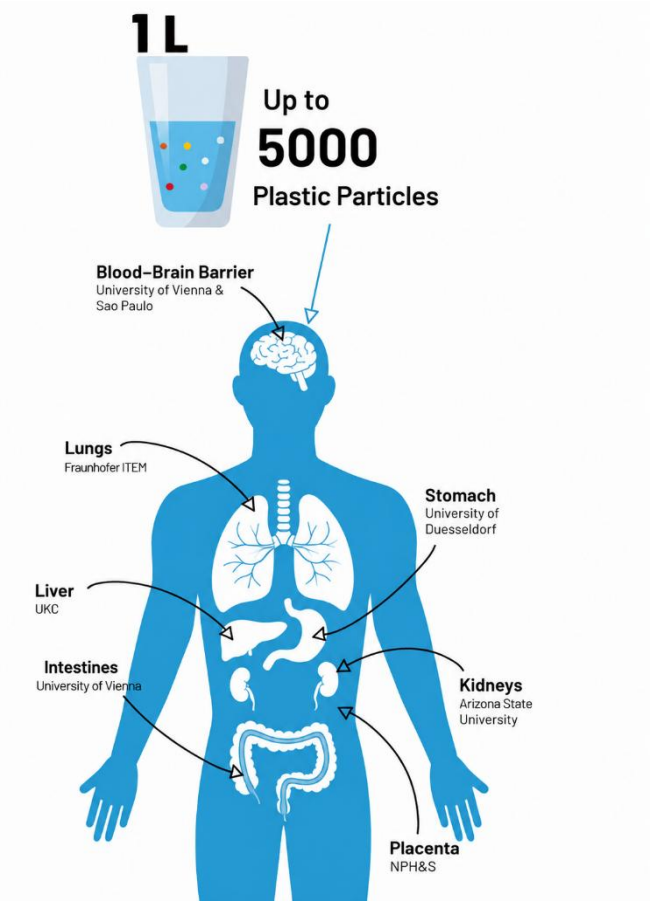


Introduction

With the SYDROS HYDO-Klar2O filter, we have developed a system together with our partner company Klar2O GmbH that is .a system specifically designed to reduce contaminants such as microplastics and PFAS. These substances pose a growing challenge to our health and environment. The filter combines modern technology with easy handling so that you can enjoy pure and safe drinking water at all times.

The invisible danger in your glass

Invisible to the eye but immeasurably harmful – microplastics and PFAS are the hidden enemies in our drinking water. Microplastics are tiny fragments of plastic waste that are less than 5 mm in size and can occur as extremely small, invisible particles and are shed by bottles, clothing, packaging and even house dust. PFAS – known as "forever chemicals" – are synthetic substances that are used universally, from nonstick pans to waterproof jackets, they are known for their extreme persistence in the environment. Together, they represent potential contaminants in everyday drinking water. Once in the human body, they don't break down – they linger. They accumulate, and science is only just beginning to see the full extent of their danger. But the first step to solving a problem is to understand it – and our filtration technology is designed to help reduce these contaminants.



No water source is safe

Worryingly, recent studies have found **up to 5000 plastic particles per liter** in regular tap water in urban centers around the world. In some samples, PFAS levels exceeded **100 nanograms per liter**, far above what health authorities consider safe. These substances have also been detected in bottled water, rainwater, and even in the most remote ecosystems.

But the shock doesn't end there – our internal studies at Klar2O have detected microplastics in over **92% of unfiltered household samples** and PFAS in **7 out of 10**.

This means that if you haven't actively filtered your water, you're probably drinking plastic and chemicals every day. Invisible. Uninvited. Unwanted.

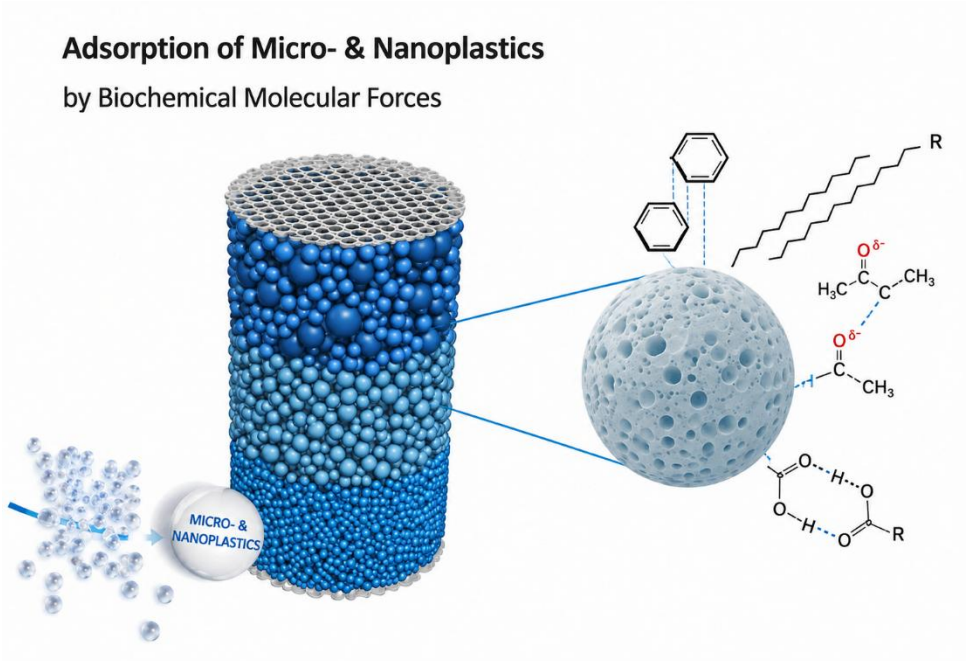
+49 1590 613 2674
info@sydros.de

Your Body vs. PFAS

Once ingested, microplastics and PFAS cannot simply be excreted. Studies suggest that microplastics can build up in the liver, lungs and intestines – potentially **triggering chronic inflammation, oxidative stress and hormonal imbalances**. PFAS are even more alarming: they are associated with **fertility problems, thyroid dysfunction, developmental delays in children, weakened immune systems, and several cancers.** They are bioaccumulative – meaning the body has no efficient way to eliminate them. Every sip of contaminated water adds another invisible dose. This is not scaremongering – it's a scientifically proven wake-up call. But where there's a threat, there has to be a solution.

A world-renowned technology — Developed by Klar2O

That's where Klar2O comes in – where patented German precision meets groundbreaking filtration science. Our filters are more than just barriers. They are **selective molecular traps** designed to capture what doesn't belong in your water. With our patented nano-coated filter medium embedded in a durable 304 stainless steel shell, we achieve **over 99% separation efficiency for a wide range of PFAS.** Unlike traditional filters, Klar2O doesn't clog or decompose prematurely – it adapts to environmental conditions. Inside the cartridge is a **multi-stage composite medium**: mechanical separation, adsorption layers, and smart surfaces that neutralize even the most stubborn molecules. The result? Clean, filtered water – free of impurities that are not filtered out by most systems.



+49 1590 613 2674
info@sydros.de

Who is Klar2O?

Klar2O is more than a brand – it's a mission in motion. Founded in Germany and driven by scientific expertise, Klar2O has emerged as one of Europe's top 10 most innovative food tech startups of 2024. Our patented filtration technology is protected in more than 11 countries, and our technology has received international recognition from climate funds, government innovation programs, and global sustainability awards. But we didn't do it alone. Klar2O works with renowned research and testing institutes, as well as university research centers such as Saarland University and the University of Luxembourg. This independent validation and ongoing collaboration ensures that every Klar2O system meets the highest global safety, performance, and innovation standards. With pilot programs from Europe to Africa and government-backed initiatives, Klar2O is more than a water filter – it's the future of clean, plastic-free hydration. And now it's in your hands.

Our patented filtration technology is protected in more than 11 countries.



+49 1590 613 2674
info@sydros.de

THE USER MANUAL STARTS HERE

1. Product Description

The SYDROS HYDO Klar2O is a compact under-sink filter system for the household. It reliably filters pollutants and ensures noticeably better drinking water directly from the tap. The cartridge was hand-filled in our factory in Germany with the patented Klar2O technology.

Technical data:

1. **Dimensions:** 6 × 28 × 12.5 cm (W × H × D)
2. **Flow rate:** 8 - 10 L/min
3. **Temperature range:** 5 - 38 °C
4. **Operating pressure:** 1 - 5.5 bar
5. **Filter replacement:** recommended every 6 months

2. Safety instructions

1. Only suitable for cold water – no connection to hot water pipes.
2. Protect from direct sunlight, frost and moisture.
3. Use only original components.
4. Check the line pressure before installation. If the pressure exceeds 5.5 bar, install a pressure-reducing valve.
5. Keep small parts out of the reach of children under 3 years of age during installation.

⚠️ ***Incorrect installation or use may result in water damage or reduced filter performance. Please follow the instructions below exactly.***

3. Package Contents

The SYDROS HYDO-Klar2O filter comes with the following components:

1. SYDROS HYDO-Klar2O Water Filter
2. Filter cartridge (pre-assembled)
3. Inlet and outlet hoses
4. Adapters 3/8" and 1/2"
5. Teflon tape for sealing
6. Mounting template
7. Screws and wall plugs
8. User Manual



Please check that all parts are complete and undamaged before installation.

+49 1590 613 2674
info@sydros.de

4. Installation

Preparation:

1. Turn off the water supply completely.
2. Have the necessary tools ready.
3. Carefully seal the threaded connections with PTFE tape.

Mounting:

1. Place the drilling template at the desired position and mark the drill-hole positions.
2. Mount the filter device at a distance of at least 10 cm from the floor.
3. Connect the inlet and outlet hose correctly.
4. Tighten all connections and check for leaks.

Commissioning:

1. Open the water supply slowly.
2. Flush the filter for at least 1 minute before first use.
3. The SYDROS HYDO-Klar2O is now ready for use.



+49 1590 613 2674
info@sydros.de

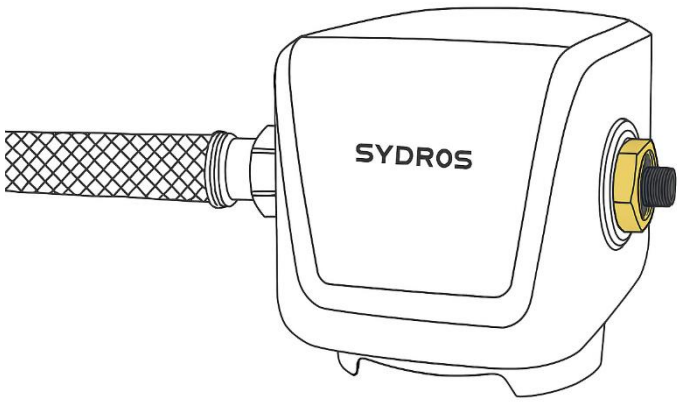




STEP 1: Connecting the hoses

Securely attach the inlet hose to *the inlet of the filter system*.

Make sure it is tight and seal the thread with Teflon tape if necessary.

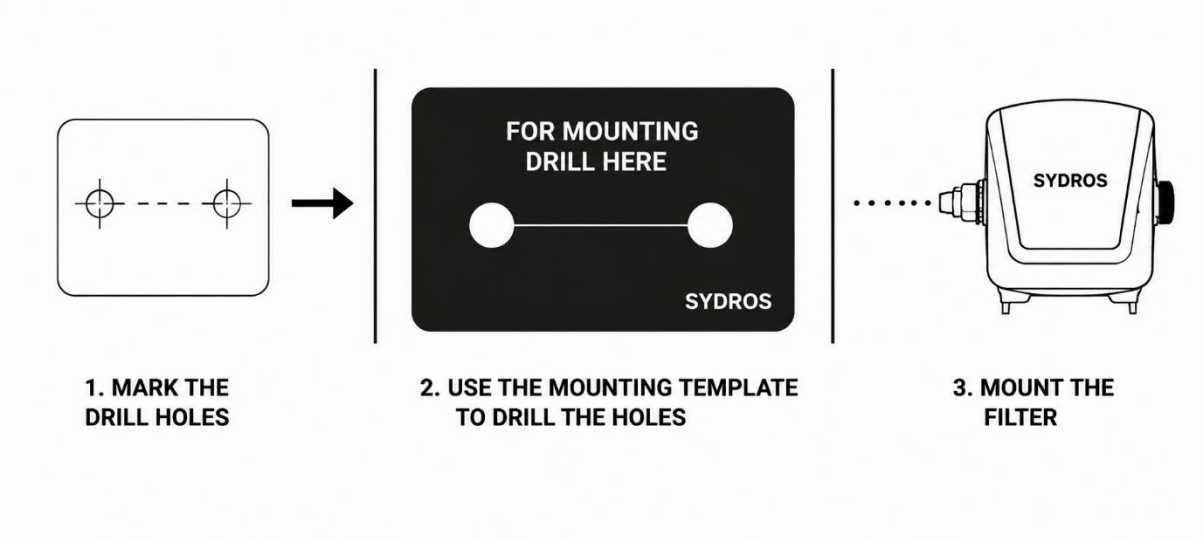


+49 1590 613 2674
info@sydros.de

STEP 2 (optional): Wall mounting of the SYDROS HYDO-Klar2O filter

Use the drilling template to mark the attachment points.

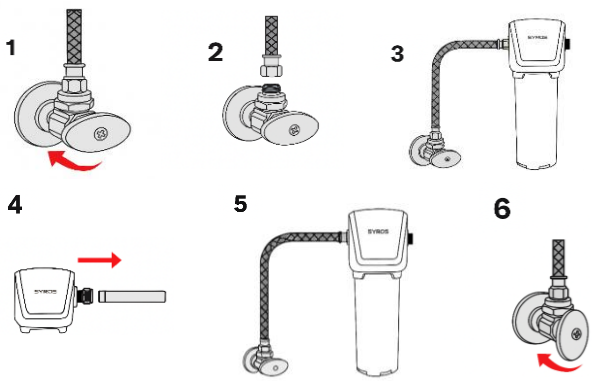
Then mount the filter unit securely on the wall with the enclosed screws and dowels.



⚠️ **Mount the HYDO water filter at least 10 cm above the floor to ensure sufficient clearance for future filter replacement.**

STEP 3: Connection to the water supply (cold water ONLY)

1. Turn off the water supply completely
2. Remove the original hose from the cold water connection
3. Connect the supplied inlet hose
4. Reconnect the original faucet hose to the filter outlet
5. If necessary, install the appropriate adapter.
6. Slowly reopen the water supply and check for leaks



+49 1590 613 2674
info@sydros.de

5. Maintenance and filter replacement

Replacement interval: Every 6 months or with noticeably reduced water flow.

To change the filter cartridge:

1. Turn off the water supply
2. Remove the filter cartridge by turning counterclockwise
3. Insert the new cartridge and tighten it clockwise
4. Open the water supply and rinse the filter for 1 minute

6. Troubleshooting

Problem	Possible cause	Solution
No water flow	Clogged filter or closed water supply	Replace the filter and check that the water supply is open
Leaks	Loose connection, damaged sealing ring	Tighten connections, replace the sealing ring if necessary
Low flow rate	Low line pressure, filter capacity exhausted	Check the water supply pressure and replace the filter cartridge if necessary

7. Warranty

Sydros Water GmbH provides a voluntary two-year manufacturer's warranty of 2 years from the date of purchase for the SYDROS product described in this user manual.

The warranty covers **defects in materials and workmanship** that occur when the product is used as intended.

The warranty does not cover, in particular, damage caused by:

- improper use or use other than intended incorrect installation or assembly,
- unauthorized modifications or repairs,
- operation outside the specified technical specifications,
- external influences or improper storage,
- normal wear and tear as well as consumables and wear parts, provided that there is no material or manufacturing defect.

The consumer's statutory rights in the event of defects exist independently of this warranty. Exercising these statutory rights is free of charge and is not limited by this warranty.

Guarantor:

Sydros Water GmbH

Kirrlacher Straße 6

76646 Bruchsal

Germany

Making a Warranty Claim:

To verify a warranty claim, please contact us and provide the product name, date of purchase, a description of the defect and, if available, proof of purchase:

Email: info@sydros.de

Phone: +49 1590 613 2674

The geographical scope of the warranty depends on the country in which the product was first sold to the consumer by Sydros Water GmbH or an authorized sales partner.

8. Disposal

The product, its components and packaging must be disposed of in accordance with the applicable legal and local disposal and recycling regulations.

Packaging:

Packaging materials must be separated by type of material and sent to the designated collection and recycling systems.

Filters, cartridges and other consumables:

Used filter media, filter cartridges and other replaceable components must be disposed of in accordance with local disposal regulations. In the event of possible contamination by special substances, different disposal requirements may apply.

Electrical and electronic products:

If the product or individual components are electrical or electronic equipment, they must not be disposed of with unsorted household waste. They must be taken to designated return or collection points.

Please also note the applicable national and municipal disposal regulations.

9. Compliance and product safety

The SYDROS product described in this user manual has been designed and manufactured in accordance with the applicable European and national requirements for product safety, health and environmental protection applicable at the time of placing on the market.

Where applicable, the requirements of **Regulation (EU) 2023/988 on general product safety** have been taken into account.

Depending on the design, function and equipment of the respective product, additional European and national legislation as well as technical standards may apply. These may include, in particular, regulations on electrical and electronic equipment, electromagnetic compatibility, electrical safety, substance restrictions, waste electrical and electronic equipment, and products and materials that come into contact with drinking water.

The legal acts, technical standards and conformity assessment procedures that are actually applicable to the respective product are determined on a product-specific basis and documented in the associated technical documentation.

CE marking:
CE marking is applied only to products for which it is required by the relevant European harmonization legislation. By affixing the CE marking, the manufacturer declares that the product in question meets the requirements of the relevant EU legislation applicable to this product.

A product-specific EU declaration of conformity is prepared and provided in accordance with the regulations applicable to the respective product, where required by law.

Manufacturer

Sydros Water GmbH
Kirrlacher Straße 6
76646 Bruchsal
Germany

Email: info@sydros.de
Phone: +49 1590 613 2674

Thank you for choosing SYDROS.

For safe and reliable operation, please refer to the technical data, safety instructions and installation and maintenance specifications of the respective product.

Looking for more information?

Scan the QR code to visit our FAQ page and discover everything you need to know.

Don't forget to follow us on Instagram to stay up to date and support SYDROS as we continue to grow every day.

SYDROSWATER