

ADVANCED

ADSORPTION

TECHNOLOGY

METAL ORGANIC FRAMEWORKS BASED ADSORBER



X1 represents the pinnacle of innovation in water management and Adsorption technology. This cutting-edge product is designed to effectively capture, retain, and purify water, making it an indispensable solution for industries facing challenges related to water scarcity, pollution, and resource management.

TARGETED CONTAMINANTS

NUTRIENTS

- Ammonia (NH₃)
- Agricultural Wastewater
- Animal Farming
- Decomposition of Organic Matter

EMERGING CONTAMINANTS

Microplastics
Personal Care Products
Endocrine-Disrupting Chemicals
Nanoparticles
Forever chemicals

HEAVY METALS

- Lead (Pb)
- Aluminium (Al)
- Mercury (Hg)
- Chromium (Cr)
- Nickel (Ni)
- Copper (Cu)
- Zinc (Zn)

ORGANIC CONTAMINANTS

- Biological Oxygen Demand (BOD)
- Pesticides (e.g. atrazine)
- Glyphosate
- Herbicides
- Pharmaceuticals
- Industrial Chemicals
- Benxene, Toluene, Phenols
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Volatile Organic Compounds (VOCs)
- Detergents

RADIOACTIVE CONTAMINANTS

- Radon (Rn)
- Uranium (U)
- Radium (Ra)

MICROBIAL CONTAMINANTS

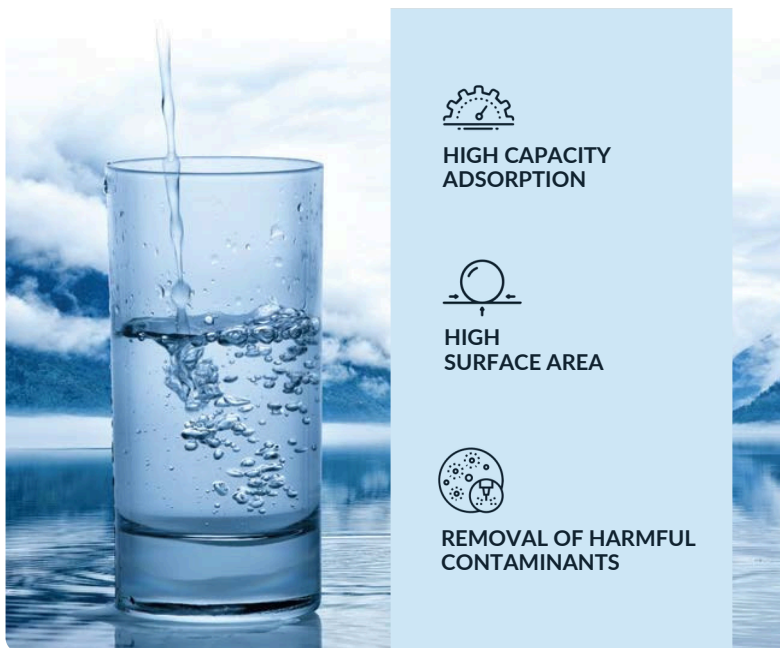
- Bacteria
- E. Coli
- Salmonella

INORGANIC CONTAMINANTS

- Fluorides (F⁻)
- Sulfates (SO₄²⁻)
- Chlorides (Cl⁻)
- Chemical Oxygen Demand (COD)

TASTE & ODOR COMPOUNDS

- Hydrogen Sulfide (H₂S)
- Methylisoborneol (MIB)
- Chlorinated Solvents
- Trichloroethylene (TCE)
- Perchloroethylene (PCE)



PREMIUM QUALITY

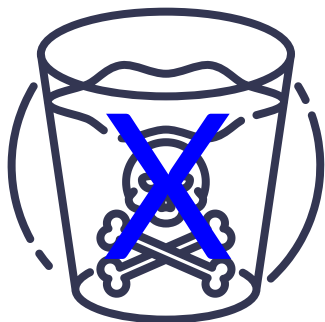


MADE IN GERMANY

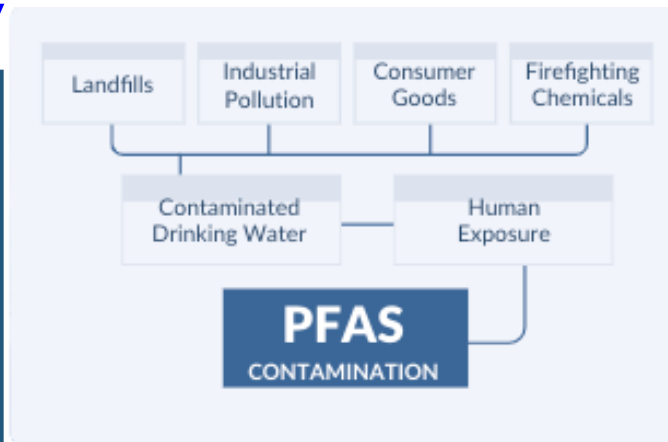
THE X1 ADSORPTION CONCEPT

The clean surface of X1 is "Hydrophilic" or "Water Loving". It has a strong attraction for Organic Compounds & other Non-Polar contaminants and adsorbs them onto the surface of X1, where they are bound by very strong VanderWaals forces.

Adsorption is the primary strength and mechanism by which X1 works, and the primary reason it is widely used to reduce organic pollutants, inorganic pollutants, taste & odor compounds, heavy metals, radioactive contaminants, nutrients and microbial contaminants. It is also widely used to improve the safety of drinking water by effectively removing all disinfection byproducts, chlorinated solvents, pesticides, industrial pollutants, and the most dangerous forever contaminants like PFOAs & PFASs. The list of PFASs includes six biggest types of troublemakers in water, i.e. PFOS, PFOA, PFNA, PFBS, PFHxS, and GenX. The latest limits in drinking water make it an absolute necessity to install X1 water systems.



X1 is produced with a unique pore structure consisting of Positive as well as Negative micro-pores, mesopores, and macro-pores. X1 adsorber has 90% Macro-Pores making it absolutely unique with a surface area of about 6000-6500 m² to remove large organic pollutants. X1 has the capacity to remove so many pollutants, thanks to its extra-large surface area. A single gram of X1 has a surface area exceeding 6000 m².



KEY FEATURES & BENEFITS OF HYDROSORB

Superior Adsorption Capacity

X1 utilizes advanced Covalent-Organic Frameworks (COFs) and Metal-Organic Frameworks (MOFs) to achieve unparalleled adsorption rates, allowing for efficient water capture and retention.

Innovative Technology

Our proprietary synthesis techniques and state-of-the-art manufacturing processes allow us to create highly porous and tunable frameworks with exceptional stability and functionality. With X quality is not a benchmark; it is a core value. Our rigorous quality control measures ensure that every product meets the highest standards of performance and reliability. We are committed to sustainable practices, utilizing eco-friendly materials and processes to minimize our environmental footprint. While maximizing the impact of our innovations.

Highly Selective

Engineered to selectively adsorb contaminants, X1 purifies water by targeting specific pollutants, ensuring cleaner and safer water for various applications.

Eco-Friendly Solution

Committed to sustainability, X1 is made from environmentally friendly materials and processes, contributing to a greener future while addressing pressing water-related challenges.

Versatile Applications

Ideal for use in all drinking water applications, industrial processes, all wastewater applications and environmental remediation, X1 adapts to a wide range of settings, helping municipalities maximize water efficiency and minimize waste.

Why Choose X1?

X1 embodies our commitment to innovation, quality, and sustainability. By leveraging our expertise in advanced materials, we provide a solution that not only meets the demand of "Most Modern Water Management" but also contributes to a sustainable future.