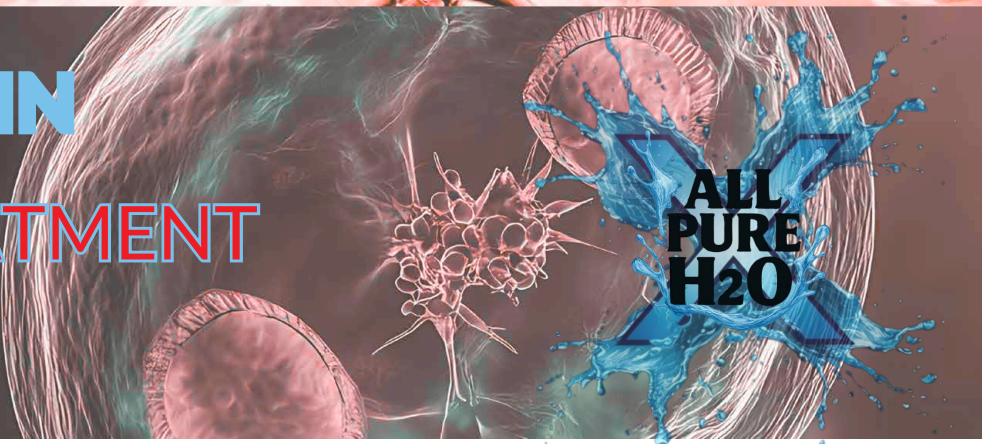


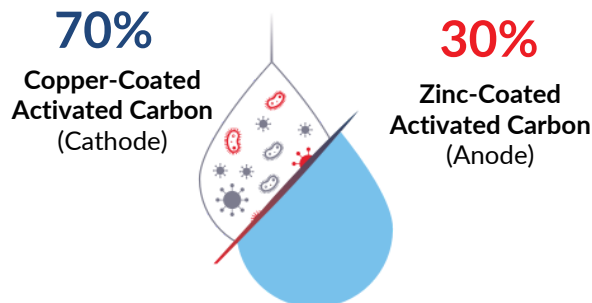
A NEW ERA IN WATER TREATMENT

INTRODUCTION



World's first **High-Redox Technology**, a next generation granular filtration media that revolutionizes water treatment by **Advanced Oxidation-Reduction (Redox)** processes

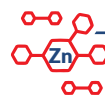
Uniquely engineered using two specialized carbon-based adsorbers:



Together, these two **highly conductive, regenerable carbons** create an **electrochemical Redox reaction** that eliminates at an atomic level. **This self-sustaining redox cycle** ensures superior oxidation, disinfection, and organics removal, including heavy metals, setting a **new standard in water treatment efficiency**.



PREMIUM QUALITY
MADE IN GERMANY



Zn-Mesoporous Metal Organic

Framework incorporated with
Copper Ions on modified **Activated Carbon**

HOW REDOX WORKS

THE REDOX MECHANISM

Dual-function granular filtration media that integrates:

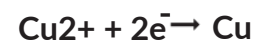
- **Zinc-Coated Activated Carbon as an Anode** (Electron Donor)
- **Copper-Coated Activated Carbon as a Cathode** (Electron Acceptor)

As water flows through the **filtration media**, it undergoes a **continuous electro chemical reaction**, where the **zinc-coated carbon** donates electrons (**Oxidation**) and the **copper-coated carbon** accepts electrons (**Reduction**). This controlled redox environment **destroys organic contaminants**, **reduces heavy metals**, and **neutralizes harmful microorganisms**.

Zinc (Zn) Oxidation



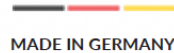
Copper (Cu) Reduction



This reaction produces highly active Hydroxyl Radicals ($\text{OH}^{\bullet}$), Sulfate Radicals ($\text{SO}_4^{\bullet}$), Superoxide Radicals ($\text{O}_2^{\bullet}$) Making X2 one of the **most powerful non-toxic oxidizers** available.

WORLD'S FIRST HIGH-REDOX TECHNOLOGY

PREMIUM QUALITY



MADE IN GERMANY

✓ ELIMINATES ORGANIC POLLUTANTS

Pesticides, Insecticides, Herbicides, Rodenticides, and Fungicides.

✓ ELIMINATES

2,4-Dichlorophenoxyacetic Acid (2,4-D), Aldrin/Dieldrin, Atrazine, Chlordane, Chlordecone, DDT, UDE, DDD, Endosulfan and Endrin.

✓ ELIMINATES 99.9% OF

Glyphosate, Heptachlor/Heptachlor Epoxide, Hexachloro benzene, Methoxy chlor, Methylene chloride, Pentachloro-phenol, Polychlorinated Biphenyls (PCBs), Pyrethroids, Toxaphene.

All these contaminants have serious health effects.



✓ ELIMINATES PHARMACEUTICALS

Scientists have demonstrated the presence of pharmaceuticals in drinking water is a major concern all over the world.

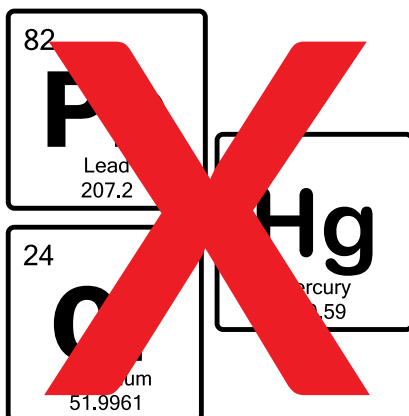
X2 is the first media that eliminates all pharmaceuticals.

✓ KILLS BACTERIA & VIRUSES

Biofilm, Legionella, E. Coli, Salmonella, Pseudomonas

✓ NEUTRALIZES ALL DISINFECTION BYPRODUCTS

No Chlorine, No Halogenated by products (HBPs) These are very toxic. No Trihalomethanes (THMs: mainly Chloroform) and No Haloacetic Acids (HAAs), with Smaller amounts of Haloaldehydes, Haloacetonitriles and Haloketones.



✓ REMOVES HEAVY METALS

Lead, Mercury, and Chromium are big concerns for the health

Lead can cause serious health problems

If too much enters your body from drinking water. It can cause damage to the **Brain and Kidneys** and can interfere with the production of **red blood cells** that carry oxygen to all parts of your body.



Eliminate Chromium-6 Out of Your Water by Redox-assisted Adsorption

The Selective Removal of Cr(VI) and Cr(Total). Unlike conventional oxidizers, which are chlorine-based compounds, is jargon to describe certain chlorine-containing substances that are used to disinfect water. The presence of **organic matter** can make them less effective as disinfectants.

They include the following chemicals

1. Sodium hypochlorite
2. Monochloramine
3. Halazone
4. Chlorine dioxide
5. HOCl (Hypochlorous Acid)

Mercury for Health Concerns

Elemental mercury, if inhaled, can cause permanent lung damage and potential brain damage. Inorganic mercury can damage kidneys and cause blood loss. Organic mercury can damage your central nervous system (**Brain and Spinal cord**). Large amounts of **mercury** or long-term exposure can lead to death if not removed from drinking water.

The Detrimental Impact of Mercury in **Drinking Water** on Worldwide Residents.

Neurological Disorders



Cardiovascular Problems



Kidney Damage



Mental Health Issues

Sustainable & Non-Toxic

- ✘ No Chlorine, Sodium Hypochlorite, Calcium Hypochlorite, Chlorine Dioxide and Chloramines including HOCl.
- ✘ Adsorbs THMs & DBPs
- ✘ Removes contaminants without adding harmful chemicals to water.
- ✘ Fully biodegradable & environmentally friendly



These chlorine products are used to:

- ✘ Disinfection/Disinfecting water
- ✘ Disinfecting pools
- ✘ Making pesticides

Multi-Contaminant Removal Efficiency

Bacteria & Viruses	99.9%
Biofilm Removal	99.9%
Pesticides & Herbicides	99.9%
Pharmaceuticals & PPCPs	99%
Lead	99.9%
Mercury	99.9%
Chromium (Cr ³ , Cr ⁶)	99.9%
Microplastics	100%
VOCs	100%
CYSTS and MTBE	100%

ADVANCED TECHNOLOGY FOR **CHEMICAL-FREE**
WATER DISINFECTION

