

KDF

All KDF® information comes from the KDF® website in USA

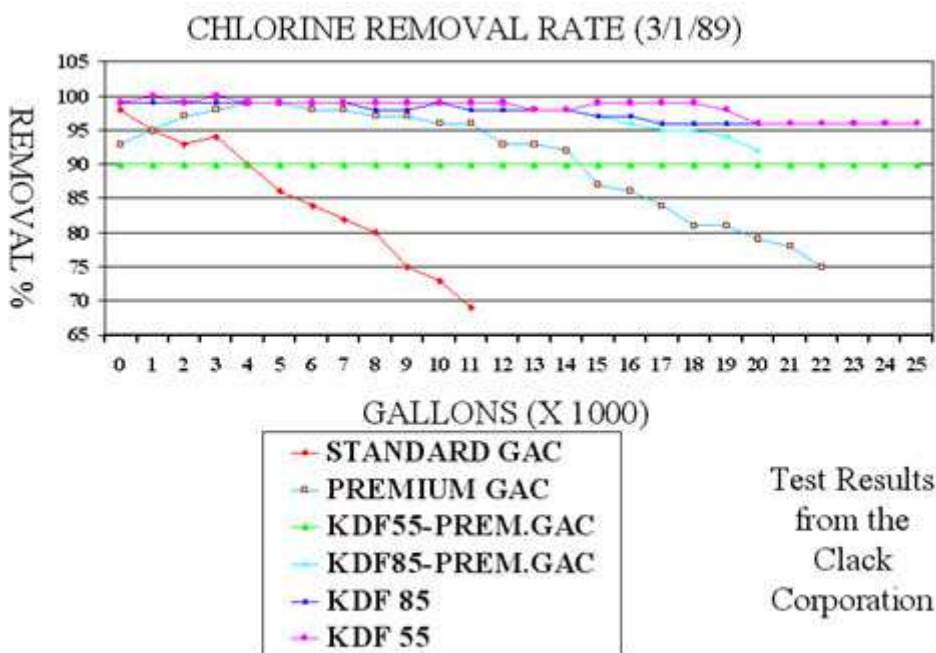


KDF Fluid Treatment, Inc. is a technological leader in the fluid treatment industry. KDF® process media are high-purity copper-zinc formulations used in pretreatment, primary treatment, and wastewater applications. KDF media supplement or replace existing technologies to dramatically extend system life, reduce heavy metals, microorganisms, scale, lower total cost, and decrease maintenance. These substances exchange electrons or bond with chlorine and other metals contained in the water to create harmless substances.

Patented KDF media is 100 percent recyclable and contains no chemical additives. Hospitals, restaurants, municipal water treatment facilities, and homes rely on KDF process media to safely reduce or remove chlorine, iron, hydrogen sulfide, heavy metals, and bacteria from their water.

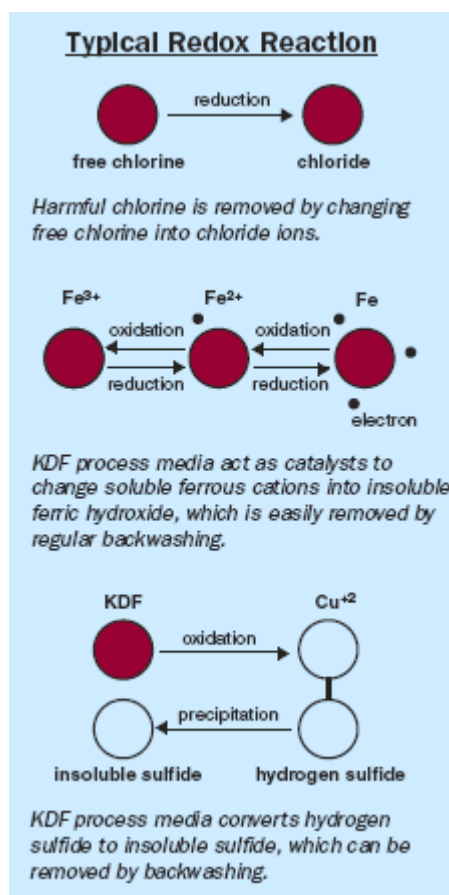
Beware of imitation product. Test results by KDF Fluid Treatment have found imitation product to contain hazardous substances (Pb lead).

KDF cartridges are bacteria static. KDF can extend the life of carbon up to 15 times. Test results can be seen in the graph below from the Clack corporation



You may not even realize that KDF® process media are working for you. KDF media is the core product of many filtration systems, and can be used in conjunction with other products to provide superior purification.

Through this basic chemical process known as redox (oxidation/reduction), KDF process media work behind the scenes to rid your water of chlorine, lead, mercury, iron and hydrogen sulfide. The redox reaction also inhibits the growth of bacteria, algae, and fungi. As an added benefit, KDF media reduce lime scale, mold, and fungi in your tub or shower.



KDF process media are completely safe. KDF media meet EPA and Food and Drug Administration standards for levels of zinc and copper in potable water, so the process is not toxic and does not cause any adverse side effects. KDF media are certified by the NSF Standard 61 and Standard 42 — Your assurance that they meet public safety standards.

What are KDF® Process Media and how do they work?

KDF® Process Media are high-purity, granulated copper and zinc-based alloys that treat water through a process based upon the principle of redox (Oxidation-Reduction). Originally, KDF was shorthand for Kinetic Degradation Fluxion.

We can explain redox like this: KDF Fluid Treatment's unique combination of copper and zinc creates an electro-chemical reaction. During this reaction, electrons are transferred between molecules, and new elements are created. Some harmful contaminants are changed into harmless components. Free chlorine, for instance, is changed into benign, water-soluble chloride, which is then carried harmlessly through the water supply. Similarly, some heavy metals such as copper, lead, mercury and others, react to plate out onto the medium's surface, thus being effectively removed from the water supply.

Why use KDF Process Media?

The marketplace is filled with good water filtration/purification systems and technologies (We should know—many of those manufacturers are some of our best customers.)

So...why consider using KDF Process Media? We can give you two good reasons

One: Because KDF Process Media enhance the performance, extend the life, reduce the maintenance and lower the total cost of many available carbon-based systems.

Two: KDF Process Media helps control microorganisms by creating an environment that's deadly to some microorganisms and that interferes with the ability of many other microorganisms to function. Either way, the

use of KDF Process Media results in the total elimination of some contaminants and a great reduction of a wide variety of others.

Benefits of KDF Process Media

- Significantly extend the life of granular activated carbon
- 100% recyclable
- Effectively remove chlorine and heavy metals and controls microorganisms
- Are available in four granular styles, each designed for a specific need
- Outperform silver-impregnated carbons

Where are KDF Process Media used?

KDF Process Media are used in a variety of pretreatment, primary treatment, and wastewater applications. They are generally used in place of, or in conjunction with, granular activated carbon filters, even carbon block or inline filters. KDF Process Media extend the life of granular activated carbon (GAC) while protecting the carbon bed against fouling by bacterial growth.

Our Media are also used to replace silver-impregnated systems. Silver is toxic, KDF Process Media are not. Silver must be registered with the EPA as a toxic pesticide, KDF Process Media do not. By the way, silver is more expensive than KDF Process Media.

What about KDF Process Media and RO, DI and IX systems?

Reverse Osmosis (RO), Deionization (DI) and Ion Exchange (IX) systems benefit from the use of KDF Process Media because our Media allow these systems to tend to their strengths. Our Media protect RO systems from chlorine degradation and bacterial contamination, extending the life of the systems' membranes. KDF Process Media protect expensive IX systems from becoming fouled with chlorine, algae, fungi and bacteria. Less fouling, longer life and reduced maintenance, all combine for lower costs.

Redox media remove up to 98% of water-soluble cations (positively-charged ions) of lead, mercury, copper, nickel, chromium, and other dissolved metals.

When filtered through KDF® media, soluble lead cations are reduced to insoluble lead atoms, which are electroplated onto the surface of the media. Other heavy metals bond to the media and may be recovered when the exhausted media pass through a copper smelte

KDF® media are incorporated into carbon blocks and other matrices for bacteria control and scale reduction.

The oxidation/reduction potential (ORP) shift by a factor of -300mV or more for water filtered through redox media controls microorganism growth. Treating water reduces bacteria and other microorganisms by disrupting electron transport, causing cellular damage. KDF process media also kill bacteria by direct electrochemical contact and by the flash formation of hydroxyl radicals and hydrogen peroxide, both of which interfere with a microorganism's ability to function