

KDF® 55 Process Medium helps you offer your customers less

When you use **KDF® 55 Process Medium** ahead of the granular activated carbon (GAC) stage in point-of-use (POU) water filters, you do three things:

One, you offer your customers a lot less than they're used to:

- Less bacteria
- Less free chlorine
- Less heavy metal content
- Less scale buildup
- Less filter maintenance

Two, you enhance the performance of the carbon.

Three, you also extend the useful life of the carbon.

Proprietary Process Media

The full line of **KDF Process Media** is so unique that it is protected by 14 US patents and numerous foreign patents. That doesn't include the patents currently pending. We have no direct competition because there is nothing else quite like **KDF Process Media**.

No one else—and we stress *no one else*—can offer you and your customers the purity or all of the

benefits of using **KDF Process Media**. Period. In addition to **KDF 55 Process Medium** for POU water filters, **KDF Fluid Treatment, Inc.** manufactures **KDF Process Media** in other forms for other specific water filtration applications.

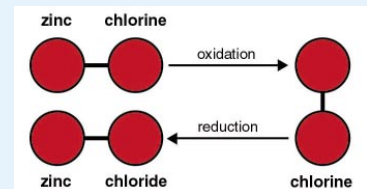
How KDF 55 Process Medium Works

KDF 55 Process Medium is a high-purity copper-zinc alloy. When used in a water treatment unit, it undergoes a chemical process known as redox. Redox is short for oxidation-reduction, which is a chemical reaction where electrons are transferred between molecules. In some cases, such as free chlorine, this transfer results in the formation of benign substances, such as chloride in this case, which then passes through the filter. In a similar way, copper, lead, mercury, and other heavy metals react to plate out onto the medium's surface effectively being removed from the water supply. **KDF 55 Process Medium** is so effective that it removes up to 98% of inorganic water-soluble heavy metals that

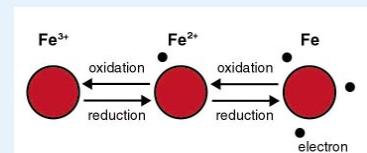
are a concern to many public health officials and many consumers.

In addition, **KDF 55 Process Medium** controls microorganisms and reduces lime scale in problem areas like showers and tubs. **KDF 55 Process Medium** even changes waterborne calcium molecules that inhibit scale buildup and improves the taste of some of your favorite beverages.

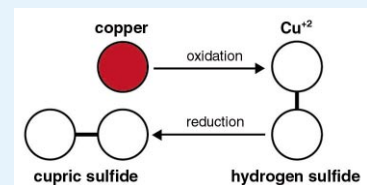
Typical Redox Reactions



Harmful chlorine is removed by changing free chlorine into water-soluble chloride ions.



KDF process media act as catalysts to change soluble ferrous cations into insoluble ferric hydroxide, which is easily removed by regular backwashing.



KDF process media reduce hydrogen sulfide to insoluble cupric sulfide, which can be removed by backwashing.

Ahead Of The Carbon, Ahead Of The Game

KDF 55 Process Medium is the ideal complement to GAC. Because GAC removes chlorine by surface chemistry, it actually fosters bacterial growth. But, unlike carbon, **KDF 55 Process Medium** is truly bacteriostatic. The electrolytic field created by the redox process is an environment deadly to some microorganisms; it also creates hydroxyl radicals and hydrogen peroxides that interfere with the ability of some other microorganisms to function.

