

# KDF shower filters

KDF is a granular or fibrous combination of copper and zinc, two dissimilar metals that generate a galvanic charge strong enough to convert chlorine into a harmless and soluble chloride.

KDF shower filters can process thousands of gallons of chlorinated water because kdf does not dissolve or adsorb\* – two factors which limit the effectiveness of other types of shower filters.

KDF is most effective with hot water -the hotter, the better.

KDF's effectiveness can be compromised if there is a lot of sediment in the water entering the filter. If not properly designed, dirt can coat the surfaces of the kdf granules, interfering with the galvanic action.

KDF does not remove organic contaminants, such as THMs (trihalomethanes).

Although capable of removing heavy metals such as lead, cadmium, arsenic, and mercury, it cannot do this (as claimed by some KDF shower filter companies) with the amount of KDF used in a short filter body, and at a high flow rate, as occur in a shower filter.

KDF is bacteriostatic\*\* and tends to reduce fungus and mildew build up in the shower.

It eliminates further occurrences of blue-green staining caused by copper leached from metal pipes by acidic water. (This is common in the Metro Vancouver area).

KDF granules can be recovered for reuse. Zinc and copper make brass – great for sculptures!

KDF shower filters meet NSF standard 177 for sustained chlorine reduction.

## Shower filters and chloramine

Chloramine is a disinfectant consisting of chlorine followed by ammonia. Although less effective as a disinfectant than chlorine, by adding ammonia fewer (and different) harmful disinfection by-products are formed. It is now commonly used instead of chlorine by many municipalities in North America.

Chloraminated water is already in a 'reduced' state by virtue of ammonia. This means that its reactivity with other substances has already been minimized. Consequently KDF does not reduce it.