

Catalytic Carbon

Adsorption and desorption Media



DESCRIPTION OF X3

PREMIUM QUALITY

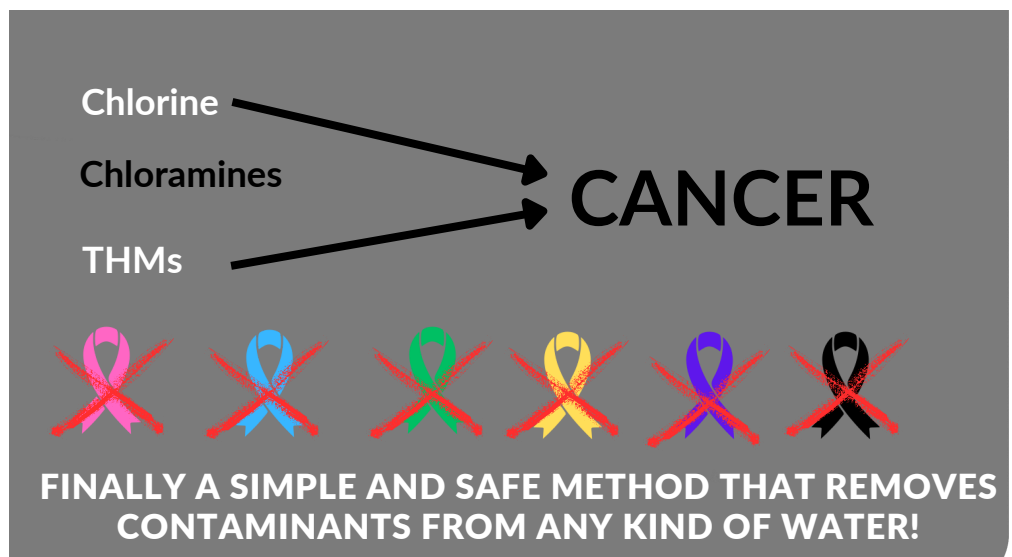
- X3 is Coconut carbon
- X3 is tested to meet NSF 61 Standard
- X3 is Catalyzed with Iron ("Catalytic Structure")
- Iron Catalyst has the highest Oxidation and Adsorption pores "Inside as well as Outside the Activated Carbon"
- Surface of X3 ranging from 2000 m²/g to 2500 m²/g

MADE IN GERMANY

Iron Particles coated inside and outside the micro-pores of X3 eliminates the need of expensive Ion- Exchange and Membrane Process.

REMOVAL OF:

Humic Substances
Chloramines
Color and Odor
Trihalomethanes
Tannins and Lignins
Phenols as p-nitro phenol
Cyanides
Arcenic
Boron
Bromides
Chromium
Copper
Lead
Mercury



REMOVAL OF TANNINS

Including humic acid, fulvic acid and major constituents of natural organic matters. Humic substances with chlorine produce disinfection by-products such as Trihalomethanes (THMs).

Other problems are the transport of hydrophobic organic contaminants and to bind heavy metals with them. A very big problem with organics are bacterial growth In water distribution systems by serving as food source that Induce unpleasant taste and color in drinking water. X3 removes tannins and humic substances. X3 Is made of coconut shells, which Is the most effective form of carbon. Activated carbon used In X3 is a Granulated Activated Carbon (GAC), which Is a technology that Is highly activated by coating a positive charge which enhances the adsorbtion of contaminants that have negative charge designed to adsorb very high level chloramines. Chlorimines replace chlorine In the disinfection process and form Trihalomethanes (THMs), which Is a cancer causing substance.

HOW DOES X3 CATALYTIC CARBON WORK?

X3 offers better than any applied conventional method a way to remove humic substances which generate a large volume of wastewater. Using X3 coated with Iron-hydroxide has huge capacity for humic substances, phosphates, copper and many other heavy metals. Humic substances are negatively charged at circumneutral pH conditions due to prevalence of carboxyl and phenol groups on their surface. Adsorption of humic substances, however Is possible on surface chemistry, surface modification of activated carbon with Iron-hydroxide coating that generates very strong positively charged catalytic carbon leading to the most favorable surface Interactions between them.