

## Chemically Activated Carbon with High Surface Area Better than any commercially available Activated Carbon

### Description:

Chemical activation enhanced better pore development with higher BET surface areas corresponding to 850-950 m<sup>2</sup>/g. Chemical activation improves not only the total surface area of the carbon materials but also greatly increases the number of **Nano-pores** in the Watch<sup>®</sup> special process. Normal Activated Carbon is indicated as micro and meso pore volumes.

### Watch<sup>®</sup> **CATCH™-AC** Media



## The Absorption Capacity Of The Activated **CATCH™-AC** is VERY HIGH

### Introduction:

Pollution caused by organic compounds is a common problem faced in every countries. All organic problems are related to health, ecology, damage to structures or amenities and interference with legitimate use of water. Organic contaminants include many categories of compounds of which phenolic reactions. Tannins is often found in all water. The main source of tannins are industrial water streams including coir factories, paper and pulp board mills and tanneries.

The most easiest method for the removal of phenolics from effluents is catching them on a carbon based Adsorbent media. **CATCH™-AC** is a very special adsorbent media based on Activated Carbon which is treated chemically.

### CATCHING

- HUMIC SUBSTANCES
- Tannins & Lignin
- Chlorine
- Chloramines
- Trihalomethanes (TMH)
- Phenols & p-nitro phenol
- DYES (Any Kind)
- AZO Dye Adsorption
- Removal of Congo Red
- Removal of Methylene Blue (MB)
- Removal of Methyl Orange (MO)

### Tannins & Lignin in Drinking Water

Tannins & Lignin can impart a yellow or light brown color, bitter taste and unpleasant odor in drinking water. The presence of tannins or lignin in drinking water may be from being natural sources but could be a matter of concern of contaminants present in surface water are also present in the well water.

### Considerations:

The characteristics of iron, iron bacteria and humic acid substances can be very similar in drinking water. It is important to determine which of these is causing water problems because the treatment options are very different. Chlorine can be used to treat iron and iron bacteria but chlorine added to water containing tannins always contributes to the formation of TRIHALOMETHANES (TMH) and they can be caught by **CATCH™-AC**. So to eliminate any kind of Humic acid and substances like tannins and Lignin, even at higher concentrations using **CATCH™-AC** is very important.

## Why CATCH™-AC ?

The application of **CATCH™-AC** granular activated carbon (GAC) differs greatly from all conventional carbons having their own advantages in the water treatment process. The raw material of the **CATCH™-AC** plays a very important role. Watch is the only manufacturer to provide a product made from multiple raw material.

### Treatment objectives:

The major treatment objectives for **CATCH™-AC** are the removal of dissolved organics (both of Low as well as High) molecular weight. Taste and Odor causing compounds, Disinfection-By-Products overall organics (DOC, TOC) also biodegradable organics (AOC & BDOC), pesticides, detergents etc. Additionally **CATCH™-AC** is the only carbon which has TWO-IN-ONE Adsorption and Filtration and it can be regenerated simply with **OXYDES<sup>®</sup>** solution.

Regeneration, cleaning and disinfection. A valve which is used for water softener is simply sufficient to design a system.

### Converting Existing Filters:

Replacing Sand/anthracite/Activated Carbon with **ONE CATCH™-AC**

You will maintain the filtration properties of the filter while adding the capability of adsorption results in relatively short

- **EBCT of < 5 - 8 minutes**

### ONCE AGAIN WHY

#### **CATCH™-AC** for Potable Water

Watch<sup>®</sup> Water is the only manufacturer to produce chemically activated from lignite raw materials so that you can be assured of optimal performance for your treatment objectives.

## **WATCH<sup>®</sup> PROMISE:**

***You will never have Disinfection-By-Products!***

### Advantages

- No Brine Valve is needed
- No Brine plate or Well is needed
- A very Simple Dilution Tank with a suction valve (non-return valve) is needed to suck **OXYDES<sup>®</sup>** solution (5% strength)
- Half a solution for each cubic feet of **CATCH™-AC**
- Watch **CATCH™-AC** life **5 to 7 years**

- **Flexibility:**  
Reactive only when needed  
5 to 7 years life time
- **Performance:** High efficiency against Humic compounds.

[www.watchwater.de](http://www.watchwater.de)