



# HQ-ACTIVATED CARBON

## ADVANCED FILTRATION TECHNOLOGIES

### HQ-ACTIVATED CARBON FILTRATION

Activated carbon is renowned for its exceptionally large specific surface area, making it an ideal filter medium for water purification. It is particularly effective at adsorbing non-polar compounds, thereby removing unwanted odors, colors, and tastes from water. With more than 6 million square meters of surface area per 500 grams of carbon, activated carbon offers a sustainable solution for air and water purification that is both cost-effective and environmentally friendly.



### WHAT IS ADSORPTION?

Adsorption is the process by which atoms, ions, or molecules from a gas, liquid, or dissolved substance adhere to a surface. Activated carbon utilizes this process to filter contaminants from water.

*Close-up of activated carbon particles*

### APPLICATIONS OF ACTIVATED CARBON

1. Water Purification: Effectively removes harmful organic substances and reduces biological contamination. Essential for both household use and industrial settings.
2. Industrial Purification: Serves as a polishing step to remove the final traces of contaminants.
3. Usage: For the removal of substances such as mineral oils, chlorine compounds, yeasts, and pesticides.

### IRON REMOVAL AND SCALE DEPOSITS

- **Iron Removal:** Before activated carbon filtration, it is necessary to remove iron from the water to prevent clogging and reduced filter capacity. This is especially important when iron levels exceed 1 mg/l.

- **Scale Deposits:** Calcium in the water can lead to scale buildup in pipes and reactors. Correcting the pH level or decalcifying is essential to manage these deposits and maintain the functionality of the filtration system.



### MAINTENANCE AND REACTIVATION

Regular backwashing of activated carbon filters is recommended to maintain their integrity and efficiency. If the filter medium becomes saturated, it can be reactivated by a specialized company.

### ECONOMIC AND ENVIRONMENTAL BENEFITS

Activated carbon filtration is a cost-effective method that not only brings low energy costs but also requires minimal space. Investing in activated carbon for your filtration needs ensures a technology that is essential for a safe and clean water source. Activated carbon is a proven choice for both everyday use and complex industrial applications.

