

ACTIVATED CARBONS

Water treatment

ACTIVATED CARBONS FOR WATER TREATMENT AND FOR THE TREATMENT OF OTHER LIQUIDS

The application of pesticides and other chemical agents for plant protection and weed control, as well as the expansion of industrial production has led to the pollution of land and direct threat to groundwater, rivers and lakes which are the source of drinking water. Most of the toxic contaminants present in the water are inorganic substances, heavy metals (such as arsenic, lead and mercury), ions (fluoride and cyanides), organic substances (such as phenol and trichlorethylene) and microbiological contaminants. Adsorption is one of the most effective and most economical techniques in water treatment. Activated carbon has been proven as an effective adsorbent for the removal of a wide variety of contaminants. All produced types of activated carbon quality are according to the EN 12915 European Standard.

Activated carbons for drinking water

Activated carbon is used in water treatment for removing free chlorine and organic materials from potable water. This contributes to better quality of water related to taste, odor, color, which is very important for water plants, production of juice, ice cream and other products. The activated carbons that can be used for that purpose are as follows:

- Powdered activated carbons (K/B powder or ACP 900/10)
- Granulated activated carbons (KZ-81/C, KCS, K-81/B, KRF)



Both types of activated carbons are made from selected high quality carbonized coconut shell activated with water steam. That assures high quality of activated carbon in regard to its activity and mechanical strength, which is the main condition for its application.

Activated carbons for waste water

The color and the odor that are present in the waste water after many industrial processes represent one of the most dangerous contaminants that directly affect the environment. Most often such waters with a very low purification process are directly discharged into the sewage system or what is even more dangerous into the rivers or lakes. From an environmental standpoint, that is completely unacceptable. The economic part is also very important.

Sometimes purified waste water can be reused in the process that significantly saves one of the most important natural resources. Pollutants from the water adsorbed on charcoal may also have a secondary application or be made inactive, which would be environmentally acceptable or even applicable.

The examples of treated waste water can be found in the wood-processing industry, in metal-processing industry (the surface protection of metals), and in other branches of industry.

