TEKHNOSORB-1 CARBON SORBENT

Description
Tekhnosorb-1 is a highly porous synthetic carbon sorbent with predominantly mesoporous structure. It is produced in the form of spherical pellets and is highly uniform in size and properties. The material exhibits high mechanical strength and chemical purity.

Technical specifications
- appearance black or slightly silver spherical pellets
- pellet size [mm] 1.0-2.0
- specific surface for argon adsorption \([\text{m}^3/\text{g}]\) 400-600
- total pore volume for water \([\text{cm}^3/\text{g}]\) 0.5-1.5
- crushing strength [kg/cm] not less than 70
- ash content [%] not more than 0.5
- bulk density \([\text{g/dm}^3]\) 400-600

Technical appraisal and economic benefits
The carbon sorbent is intended for use in water treatment. Along with being highly effective in water purification, the material can be subjected to repeated vapor-gas regeneration directly in absorption filters, which considerably increases the service life of the filters and decreases the operating costs compared to the traditionally used active carbon.

Application areas
Tekhnosorb-1 is used to remove organic and mineral contaminants from domestic water and industrial-municipal sewage using a sorption technology.

Development stage
The technology and equipment for producing the sorbent were designed at the Design Technological Institute of Industrial Carbon. Production of pilot batches was launched. The production conforms to the specifications designed at the Institute and approved in the prescribed manner.

Patent situation
Know-how is available.

Commercial offers
Product delivery contracts; sale of licenses, know-how contract.

Estimated cost
The estimated cost of Tekhnosorb-1 is 120 rubles/kg.

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