

VNIITU -2 CARBON ENTEROSORBENT

Description

The mesoporous carbon VNIITU-2 enterosorbent consists of ground, shiny, black, spherical granules without odor and taste, distinguished by high chemical purity, lack of dust, and complete inertness toward biological liquids. The VNIITU-2 enterosorbent is capable of absorbing medium-molecular weight and high-molecular weight toxins, endotoxins, bacteria, urea, creatinine, bilirubin, dyes, gases, heavy metals, fermenting and rotting products, organophosphorus compounds, and mineral toxic chemicals from biological liquids and the digestive tract.

Technical specifications

Size of spherical granules, mm: 0.5-1.0
Total volume of pores, cm³/g: not less than 0.4
Specific surface for CTAB adsorption, m²/g: 70-145
Adsorptive activity (for methylene blue), g/g: not less than 0.03
pH of adsorbent: 6-8

Technical appraisal and economic benefits

In comparison with known home-made and foreign analogs, the material is characterized by high purity and mechanical strength of granules, complete lack of dust, a convenient pharmaceutical form, good evacuation from the digestive tract, and standardization.

Application areas

VNIITU-2 carbon enterosorbent is used in adults for detoxication in cases of acute endogenic and exogenic toxicoses, diseases with toxic syndromes, including poisoning with alkaloids, heavy metal salts, and other poisons, and in cancer patients treated with beam-therapy and polychemotherapy. The drug is used in multimodality therapy of food toxicoinfections, dysentery, salmonellosis, burn disease at the toxemia and septicotoxemia stage, chronic nephritis, chronic hepatitis (active and cholestatic), viral hepatitis, hepatocirrhosis, atopic dermatitis, and bronchial asthma. The enterosorbent is assigned in cases of meteorism and before abdominal examination (X-ray and ultrasound).

Development stage

Commercial production of the carbon enterosorbent was launched at the Design and Technology Institute of Industrial Carbon, SB RAS. A federal license for the production, storage and sale of the product was obtained.

Patent situation

A patent was granted in the Russian Federation.

Commercial offers

Supply of the enterosorbent in packages of 10 and 650 g.

Estimated cost

The estimated cost of VNIITU-2 is 256 rubles/kg.

Contacts

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