

**98-0259**

The invention relates to the processes and devices for water treatment and can be used for purification of potable water in the household and field conditions, at processing industrial plants and enables provision of water complex purification from toxic impurities of inorganic and organic matters as well as microorganisms.

The summary of the invention consists in the fact that the water is purified by the successive passage thereof through filter layers, ion-exchange and absorbing materials.

The novelty in the process consists in the fact that the water is additionally passed through an ionite layer having a bactericidal action, expanded, high-porous polypropylene with the pores dimensions from 0,2 to 100 mm is used as a filter material, as ion-exchange materials are used chemosorbent, carboxyl-containing, less and highly basic fibrous materials and in the capacity of sorbing materials it is used a mixture of absorbent carbons and/or carbonifibrous sorbents.

The device for realization of this process comprises a body with a cover, installed into the body with the possibility of turning, inlet and outlet pipes, a filter-chuck with multi-layer charging, into the first and last layer comprising expanded highly porous polypropylene and between them successively there are placed an ionite layer having a bactericidal action, a layer of chemosorbent, carboxyl-containing less or highly basic fibrous materials and/or a layer consisting of a mixture of absorbent carbons and/or carbonifibrous sorbents.

The technical result of the invention consists in carrying the quality of the water to the hygienic norms, in the flexible adaptation possibility of the filter-chuck charging to the quality of water of a concrete region.

Claims: 14

Fig.: 3