

The proposed method for producing articles for protection against radiation implies using composite material consisting of filler and base material, forming the articles, and impregnating the formed articles with impregnating solution. The method consists in preparing the filler, which contains dispersed particles of  $0.1\text{ }\mu\text{m}$  in average dimension and  $0.3 \dots 2000\text{ m}^2/\text{g}$  in specific surface area, with the volume of the particles measuring up to 1.5 % of the total volume of the filler, determining the weight of the filler that ensures abnormal absorption of radioactive radiation, and using 4 ... 12 % of the volume of the filler for producing the impregnating solution and the rest for forming the articles. The formed articles are dried, treated with the impregnating solution, and exposed to pressure, temperature, and other factors that ensure the required physical and mechanical properties of the articles. The proposed method provides a possibility to reduce the thickness and the weight of the articles while increasing the radiation attenuation coefficient about three times.