Employees of the Novosibirsk State University have created an “antistatic” polymer material for the safe storage and transportation of explosive substances. The material is based on carbon nanotubes that give it electrical conductive properties. The development was funded by the NTI Foundation and is already patented by the university.

The material can be used to store and transport flammable liquids and powders, preventing the accumulation of static electricity. To do this, it is enough to add 0.05-0.5% of the nanotubes to the polymer structure.

Studies have shown that the material has a stable electrical conductivity corresponding to GOSTs in electrostatic safety, and does not create sparks even with high concentrations of hazardous substances.

According to the university, negotiations are now underway with industrial partners on the implementation of technology in industrial production.

“This material can be used in the production of products intended for storage and transportation of explosive powders and flammable liquids, for use at petrochemical, chemical, gas, coal and other industries, where ordinary plastic containers and capacities can be dangerous due to the accumulation of static electricity,” said the prospect of development of the Senior Researcher Functional materials Dmitry Chebochakov.