

Invention relates to method for producing pure expanded graphite used in the manufacture of high temperature seals. The method is carried out as follows: natural graphite is first treated with a solution containing an acid and an oxidizing agent, in which concentrated sulfuric acid and potassium dichromate are used as the acid and oxidizing agent, the solid phase is separated from the liquid phase by filtration, washed with deionized water to a neutral pH, and then treated with purifying reagents, for which a solution of disodium ethylenediaminetetraacetic acid in an ammonia medium is initially used, 250–400 cm³ per 100 g of solid phase; the purifying reagent and the solid phase are mixed at a temperature of 50–100 °C for 0.5–2.0 hours, the solid phase is separated from the liquid phase by filtration, washed with deionized water until a negative reaction to ammonium ions is obtained, then 450–550 cm³ of ammonium bifluoride solution in hydrochloric acid per 100 g of solid phase is taken; the solid phase and the solution is mixed for 6–12 hours at a temperature of 50–70 °C or for 24 hours at room temperature; then the solid phase is separated from the liquid phase, washed with deionized water until a negative reaction to chloride ions is obtained, the solid phase is separated from the liquid phase, dried, and rapidly heated in a thermal shock mode to a temperature of 800–1200 °C. Technical result: reducing the cost of cleaning agents while maintaining the purity of expanded graphite.