The invention relates to a process for obtaining a sorbent on base of diatomite for liquid purification from fluorine ions.

The process, according to the invention, includes milling of diatomite, its subsequent treatment with 1...3 M solution of sodium hydroxide in the diatomite-base ratio of 0.65...1.35, at the temperature of  $50...60^{\circ}$ C during 30...90 min, with aluminum salt solution of 1.25...1.50 M in the atomic ratio Al:Si of 1.95...2.50 at a pH smaller than 3.5 during 2...5 hours at agitation and with 25% ammonia solution at a pH greater than 9 during 2...5 hours at agitation, with the subsequent washing up to a neutral pH value, drying in the air during 24 hours, as well as at the temperature of  $120...130^{\circ}$ C during 2 hours.

Claims: 1