
Alkylammonium Decomposition on Montmorillonite Surfaces in an Inert Atmosphere

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Abstract: A study of the thermal transformation of alkylammonium cations adsorbed on the surface of a montmorillonite in various conditions of hydration has been carried out. The experimental conditions were: inert atmosphere, temperatures below 250° C and time periods up to 270 days. The reactions observed are mainly transalkylations, for which a mechanism of acid catalysis is proposed. A high degree of dissociation of the water remaining on the surface of the clay is required and is attained for an optimal, and rather low, water content of the clay.

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