
Gas Chromatographic Pathways for Certain Chloro-Alkylammonium Montmorillonites

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Abstract: A series of chloro-alkylammonium montmorillonites was produced by cation exchange from Na⁺-montmorillonite. Gas chromatographic data were obtained for light hydrocarbons and certain oxides of nitrogen. Surface area and X-ray powder diffraction studies were made on each organo-clay, making possible differentiation between possible chromatographic pathways. Adsorption of the gas molecules on the silicate sheet was determined to be the dominant chromatographic pathway for all gases studied.

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