

KHẢO SÁT QUÁ TRÌNH ĐIỀU CHẾ SÉT HỮU CƠ TỪ BENTONIT (BÌNH THUẬN) VÀ DIMETHYLDIOCTADECYLAMMONI CLORUA

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TÓM TẮT:

This paper report, the first effort to synthesize organoclay by wet method and study the influence of reactive conditions in the preparation of organoclay from bentonite (Binh Thuan) and dimethyldioctadecylammonium chloride (DMDOA) on the distance of the organoclay layers (d_{001}) and the level of intrusion DMDOA into bentonite has been studied. Experimental results showed that the preparation conditions suitable organoclay from bentonite (Binh Thuan) and DMDOA are obtained. By X-ray diffraction, thermal analysis (DTA – TG) methods have identified conditions suitable organoclay was : reaction temperature 600C, volume ratio DMDOA /bentonite is 1:1, the pH of the solution: 9.0, reaction time 4h, the product is dried for 24h at 80oC. In these conditions, organoclay is modulation $d_{001} = 41.300 \text{ \AA}$, organic matter content in the product is 35.57%. With the method of infrared absorption spectrometry and scanning electron microscope showed that the organoclay alkyl circuit was inserted between layers of clay to make basic spacing of bentonite was increased significantly. Organoclay products obtained layer structure and high porosity to facilitate the use of polymers in the network for inclusion in the synthesis of composite materials nanopolyme.