

Supramolecular Arrangement of Tensioactive Molecules in Interlayer Spaces of Two Organophilic Clays

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Studies of mixed systems using clays and tensioactive molecules (TA) are of particular importance in many fields such as medicine, pharmacy and cosmetics. The substitution of the initial cations and intercalation of cationic organic molecules in the interlayer spaces of the clay structure lattice provide new physicochemical properties. The aim of the present study consists in a structural characterisation of two different purified and organophilic clays, mainly made of smectite with a marked montmorillonitic nature, as a function of the inserted TA quantity using high-resolution X-ray powder diffraction. Two different TA are used, the benzyltétradécyltriméthylammonium (BTDMA) and the benzylodécyltriméthylammonium (BDDMA).

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