

〈原 著〉

紫外線吸収剤（パラアミノ安息香酸エチル）および 雲母（層状無機化合物）との層間化合物*

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Intercalation Compound of Ultraviolet Absorber (4-Aminobenzoic Acid Ethyl Ester) and Mica (Inorganic Layered Compound)*

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Abstract

The interaction between two types of micas, a sodium-type synthetic mica (Na-TSM), or a natural white mica (muscovite), and 4-aminobenzoic acid ethyl ester (EAB) of an ultraviolet absorber was studied. The interlayer spacing (*d*-value) of Na-TSM obtained by X-ray diffraction analysis increased from 1.2 to 1.8 nm after heating of the mixture of EAB and Na-TSM. It was found that EAB intercalated into Na-TSM by means of heat processing without solvents. However, EAB could not intercalate into muscovite. Consequently, a marked absorption in UV region of 250–350 nm by the EAB intercalation compound of Na-TSM was observed by the diffuse reflectance spectrum analysis. It was suggested that a new ultraviolet absorber intercalation compound (UV protective agent) could be obtained by EAB in combination with Na-TSM.

Key words: intercalation compound, mica, ultraviolet absorber, 4-aminobenzoic acid ethyl ester, UV protective agent, diffuse reflectance spectrum analysis.