

Photoreactivity and Photoluminescence of Aluminum Maltolate

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Aluminium maltolate shows a longest-wavelength absorption at $\lambda_{\max} = 314$ nm which is of the intraligand (IL) type. IL excitation leads to a photodecomposition of the ligand ($\phi = 0.04$ at $\lambda_{\text{irr}} = 313$ nm, in ethanol). While a fluorescence is not observed, Al maltolate displays a phosphorescence in low-temperature glasses ($\lambda_{\max} = 510$ nm at 77 K, in ethanol).

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