Simple Methylcadmium Alkoxides

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The reaction of dimethylcadmium with alcohols R-OH in equimolar ratio leads to the formation of tetrameric methylcadmium alkoxides with molecular formula [(MeCd)₄ (OR)₄] [R = Me (1), Et (2) and ⁱPr (3)]. These compounds have been characterised by ¹H, ¹³C NMR and IR spectroscopy, by mass spectrometry, elemental analyses and by X-ray crystallography (for 2 and 3). The solid state structures show distorted cubane-type aggregates with Cd₄O₄ cores. The structural aspects and the spectroscopic characterisations of these compounds are discussed.

Key words: Alkoxide, Cadmium, Crystal Structure