

Unerwartete Reaktionsprodukte bei der Umsetzung von Mesitylmagnesiumbromid mit Arsentribromid

Unexpected Products from the Reaction of Mesitylmagnesium Bromide and Arsenic Tribromide

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Dimesitylarsenic Bromide, Enneabromotriarsenate(III), Magnesium-tetrakis(acetonitrile)-bis(tetrahydrofuran) Cation, X-Ray Data

Irrespective of the ratio of the reactands AsBr_3 and mesMgBr ($\text{mes} = \text{mesityl}$), two products are formed in THF solution: dimesitylarsenic bromide and a magnesium bromoarsenate of composition $\text{MgAs}_5\text{Br}_{17} \cdot n \text{ THF}$. The latter, on crystallization from acetonitrile, yields $[\text{Mg}(\text{NCMe})_4(\text{THF})_2][\text{As}_3\text{Br}_{11}]$. The anion of this salt can be described as derived from three face sharing AsBr_6 octahedra. The lone pair of electrons at the As atoms is stereochemically not active.

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