

Über das Octastannandiid $R^*_6Sn_8[Na(THF)_2]_2$ und zur möglichen Existenz des Octastannans $R^*_6Sn_8$ [1]

On an Octastannanediide $R^*_6Sn_8[Na(THF)_2]_2$ and the Possible Existence of an Octastannane $R^*_6Sn_8$ [1]

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Silicon, Tin, Sodium, Tincubane, X-Ray Data

The black, air and moisture sensitive octastannanediide $R^*_6Sn_8[Na(THF)_2]_2$ (**4**) ($R^* = Si^iBu_3$) is prepared by reaction of $Sn[N(SiMe_3)_2]_2$ with R^*Na in *t*BuOMe at $-78^\circ C$. Red brown octastannane $R^*_6Sn_8$ (**5**) is formed by thermolysis of the tristannacyclopropene $R^*_4Sn_3$ in benzene at $100^\circ C$. According to the result of the X-ray structural analysis, **4** contains a Sn_8 cubane with six Sn atoms each connected with R^* and two at the end of a space diagonal connected with $Na(THF)_2$. A preliminary X-ray structure analysis shows **5** to adopt the same Sn_8 cubane structure as **4** with two bare Sn atoms at the end of a space diagonal.