

Neuartige Synthese und Molekülstruktur von Benzylkalium (thf)[KCH₂C₆H₅]₂

Novel Synthesis and Molecular Structure of Benzyl Potassium (thf)[KCH₂C₆H₅]₂

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Z. Naturforsch. **53b**, 625–627 (1998);
eingegangen am 24. Februar 1998

Potassium, Benzyl Potassium, X-Ray Data

The reaction of potassium with hexamethyldistannane in a refluxing solvent mixture of toluene and tetrahydrofuran (ratio 10:1) yields the red tetrahydrofuran adduct of benzyl potassium (thf)[KCH₂C₆H₅]₂ due to the metalation of toluene by the potassium trimethylstannanide intermediate. The solid state structure of (thf)[KCH₂C₆H₅]₂ contains dimers with only one potassium coordinated to a tetrahydrofuran molecule. These dimers form a polymer through benzyl bridging with shortest K-C distances at 292 pm.