

**Benzylgallium-Verbindungen. Die Kristallstrukturen von
[Mg₃Br_{2,4}Cl_{1,6}(OEt₂)₆][Ga(CH₂Ph)₄]₂ · 0,5 Toluol
und [(3,5-Me₂C₆H₃CH₂)₂GaBr]₂**

Benzylgallium Compounds. The Crystal Structures of
[Mg₃Br_{2,4}Cl_{1,6}(OEt₂)₆][Ga(CH₂Ph)₄]₂ · 0.5 Toluene and [(3,5-Me₂C₆H₃CH₂)₂GaBr]₂
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Gallium Compounds, Magnesium Compound, Crystal Structures

[Mg₃Br_{2,4}Cl_{1,6}(OEt₂)₆][Ga(CH₂Ph)₄]₂ · 0.5 toluene (**1**) can be obtained by the reaction of one equivalent of GaCl₃ with four equivalents of PhCH₂MgBr in Et₂O. Recrystallization of the crude product from toluene at 60°C gives colorless crystals of **1**. Treatment of GaCl₃ with two equivalents 3,5-Me₂C₆H₃CH₂MgBr in Et₂O gives after recrystallization from toluene the diorganogallium bromide [(3,5-Me₂C₆H₃CH₂)₂GaBr]₂ (**2**). **1** and **2** were characterized by NMR, IR and MS techniques as well as by X-ray structure analyses. **1** consists in the dication [Mg₃Br_{2,4}Cl_{1,6}(OEt₂)₆]²⁺, two gallate units [Ga(CH₂Ph)₄]⁻ and a toluene molecule, disordered around a center of inversion. **2** forms centrosymmetric dimers [(3,5-Me₂C₆H₃CH₂)₂GaBr]₂.

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