

Aluminum and Gallium Hydrazides Derived from N-Aminopyrrole and N-Aminopiperidine

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Dedicated to Professor Wolfgang Jeitschko on the occasion of his 70th birthday

The heterocyclic hydrazine derivatives N-aminopyrrole, $\text{H}_2\text{N-NC}_4\text{H}_4$, and N-aminopiperidine, $\text{H}_2\text{N-NC}_5\text{H}_{10}$, reacted with the hydrides $\text{H-Al(CMe}_3)_2$ or $\text{GaH}_3\text{NMe}_2\text{Et}$ by the release of elemental hydrogen and the formation of the corresponding aluminum and gallium hydrazides. These products are dimerized in the solid state *via* Al-N-Al or Ga-N-Ga bridges and possess four-membered E_2N_2 heterocycles with two exocyclic N-N bonds.

Key words: Aluminum, Gallium, Hydrides, Hydrazides, Heterocycles