# Lithium complexes supported by tripodal diaminebis(aryloxido) ligands: synthesis and structure.

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Streszczenie

The diaminebis(aryloxido) ligand precursors $H_2L^1$ and $H_2L^2$ [$H_2L^1$ = $Me_2NCH_2CH_2N(CH_2\text{-}4\text{-}CMe_2CH_2CMe_3\text{-}C_6H_3OH)_2$; $H_2L^2$ = $Me_2NCH_2CH_2N(CH_2\text{-}4\text{-}Me\text{-}C_6H_3OH)_2$] were synthesized by a straightforward single-step Mannich condensation. Their reactions with 2 molar equivalents of MeLi in thf afforded [$Li_4(\mu\text{-}L\text{-}\kappa^4O,N,N,O)_2(thf)_2$] (**1a**, $L^1$; **1b**, $L^2$) and unexpectedly small amounts (~9%) of [$Li_6(\mu\text{-}L\text{-}\kappa^4O,N,N,O)_2(\mu^3\text{-}Cl)_2(thf)_4$]·thf (**2a**·thf; $L^1$; **2b**·thf, $L^2$). Stoichiometric reactions of LiCl, MeLi and ligand precursors $H_2L$ led to the formation of **2a** and **2b** in high yield (~80%). All compounds were characterized by chemical and physical techniques including X-ray crystallography for $H_2L^1$, $H_2L^2$, **1b**, **2a** and **2b**.

Adres publiczny

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