Darstellung, ^{11}B-NMR- und Schwingungsspektren von *cis*-Monoethylmononitrotetrahydro-*closo*-hexaborat(2-) sowie Kristallstruktur von *cis*-$(Ph_4As)_2[B_6H_4(C_2H_5)(NO_2)]$

Synthesis, ^{11}B NMR and Vibrational Spectra of *cis*-Monoethylmononitrotetrahydro-*closo*-hexaborate(2-) and Crystal Structure of *cis*-$(Ph_4As)_2[B_6H_4(C_2H_5)(NO_2)]$

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cis-Monoethylmononitrotetrahydro-*closo*-hexaborate(2-), Crystal Structure, ^{11}B NMR Data, Vibrational Spectra

By electrochemical oxidation of $(n\text{-}Bu_4N)[B_6H_5H^{fac}(C_2H_5)]$ in the presence of nitrite ions and of the base DBU in dichloromethane solution *cis*-$[B_6H_4(C_2H_5)(NO_2)]^{2-}$ is formed. X-ray diffraction analysis has been performed on a single crystal of *cis*-$(Ph_4As)_2[B_6H_4(C_2H_5)(NO_2)]$ (triclinic, space group P1; a = 10.673(4), b = 10.907(4), c = 21.237(4) Å, α = 80.789(4), β = 83.117(4), γ = 66.548(2)°, Z = 2). The ^{11}B NMR spectrum is consistent with a disubstituted octahedral B_6 cage with local C_s symmetry. The IR and Raman spectra exhibit characteristic CH_3, CH_2, NO_2, BN, BH and B_6 vibrations.