

# Boryl-substituted Zirconocene Dichloride Complexes as Catalyst Precursors for Homogeneous Ethylene Polymerization

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*Dedicated to Professor Helgard G. Raubenheimer on the occasion of his 65<sup>th</sup> birthday*

The synthesis and characterization of 16 new boryl-substituted zirconocene dichloride complexes are reported. After activation with methyl aluminoxane (MAO) these complexes are catalysts for homogeneous ethylene polymerization. The combination of these complexes with nickel catalysts containing Lewis basic substituents produces polymers with bimodal molecular weight distributions.

*Key words:* Zirconium, Ethylene Polymerization, Donor-Acceptor Catalysts, Bimodal Molecular Weight Distributions