Supplementary Materials

Novel cobalt dichloride complexes with hindered diphenylphosphine ligands: synthesis, characterization and behavior in the polymerization of butadiene

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Figure S20. FTIR spectrum of CoCl₂[PPh₂(NMDPP)]₂ (2).

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Figure S1. ¹³C NMR spectrum (olefinic region) of the polybutadiene of Table 2, run 1.



Figure S2. ¹³C NMR spectrum (olefinic region) of the polybutadiene of Table 2, run 3.



Figure S3. ¹³C NMR spectrum (olefinic region) of the polybutadiene of Table 2, run 4.



Figure 4. ¹³C NMR spectrum (olefinic region) of the polybutadiene of Table 2, run 5.



Figure 5. ¹³C NMR spectrum (olefinic region) of the polybutadiene of Table 2, run 6.



Figure 6. ¹³C NMR spectrum (olefinic region) of the polybutadiene of Table 2, run 7.



Figure 7. FTIR spectrum of the polybutadiene of Table 2, run 1.



Figure 8. FTIR spectrum of the polybutadiene of Table 2, run 2.



Figure 9. FTIR spectrum of the polybutadiene of Table 2, run 3.



Wavenumber (cm⁻¹) Figure 10. FTIR spectrum of the polybutadiene of Table 2, run 4.



Wavenumber (cm⁻¹) Figure 11. FTIR spectrum of the polybutadiene of Table 2, run 5.



Figure 12. FTIR spectrum of the polybutadiene of Table 2, run 6.



Wavenumber (cm⁻¹) Figure 13. FTIR spectrum of the polybutadiene of Table 2, run 7.



Figure S14. X-ray powder spectrum of the polybutadiene of Table 2, run 1



Figure S15. X-ray powder spectrum of the polybutadiene of Table 2, run 2.



Figure S16. X-ray powder spectrum of the polybutadiene of Table 2, run 3.



Figure S17. X-ray powder spectrum of the polybutadiene of Table 2, run 4.



Figure S18. X-ray powder spectrum of the polybutadiene of Table 2, run 6.



Figure S19. FTIR spectrum of $CoCl_2(P^tBuPh_2)_2$ (1).

