Polyisoprene block copolymers as support for metallocene and post-metallocene catalytic systems toward ethylene polymerization

Bertrand Heurtefeu,†,‡ Jules Oriou,†,‡ Emmanuel Ibarboure,†,‡ Éric Cloutet,†,‡ and Henri Cramail †,‡,*

† Université de Bordeaux, Laboratoire de Chimie des Polymères Organiques, IPB-ENSCBP, 16, Avenue Pey Berland, Pessac Cedex, F-33607, France

‡ CNRS, Laboratoire de Chimie des Polymères Organiques, Pessac Cedex, F-33607 France

* cramail@enscbp.fr

Supporting Information

Fig. 1 Photography of PI270- b-PMMA54 dispersions with MAO. At 1 mg/ml, no more sedimentation is observed.

Fig. 2 SEC traces of polyethylenes produced with PI71- b-PMMA10 as a support and MeDIP(2,6iPrPh)2FeCl2 as a catalyst (detector: refractometer)
**Fig. 3** SEM picture of PE prepared MeDIP(2,6iPrPh)_2FeCl₂ in the presence of PI₇₁₋₇₋PMMA_{₁₀} (run 7)

**Fig. 4** SEC traces of polyethylenes produced with PI₇₁₋₇₋PMMA_{₁₀} as a support and MeDIP(2,6iPrPh)_2FeCl₂ as a catalyst (detector: refractometer)

**Fig. 5** SEM picture of PE prepared MeDIP(2,6iPrPh)_2FeCl₂ in the presence of PI₁₆₋₇₋PMMA₄ (run 15)
Fig. 6 SEM picture of PE prepared MeDIP(2,6iPrPh)₂FeCl₂ in the presence of PI₂₇₋₇-PEO₄ (run 10)

Fig. 7 SEM picture of PE prepared Ind₂ZrCl₂ in the presence of PI₂₇₀₋₇-PMMA₅₄ (run 5)

Fig. 8 SEM picture of PE prepared with Ind₂ZrCl₂ in the presence of PI₇₁₋₇-PMMA₁₀ (run 8)
**Fig. 9** SEM picture of PE prepared Ind$_2$ZrCl$_2$ in the presence of PI$_{27}$-$b$-PEO$_{50}$ (run 3)