

Supporting Informations

Impact of the *in situ* creation of an epoxy based thermosetting minor phase on the physical properties of a PP based blend

Lúisa Barroso Gago^a, Mathilde Auclerc^a, Karim Delage^a, Nicolas Garois^b, Philippe

Cassagnau^a, Véronique Bounor-Legaré^{a}*

^a Univ Lyon, Université Lyon1, CNRS UMR 5223, Ingénierie des Matériaux Polymères, F-69622, LYON, France ; *bounor@univ-lyon1.fr

^b Hutchinson, Centre de Recherche, Rue Gustave Nourry - B.P. 31, 45120, Chalette-sur-Loing, France

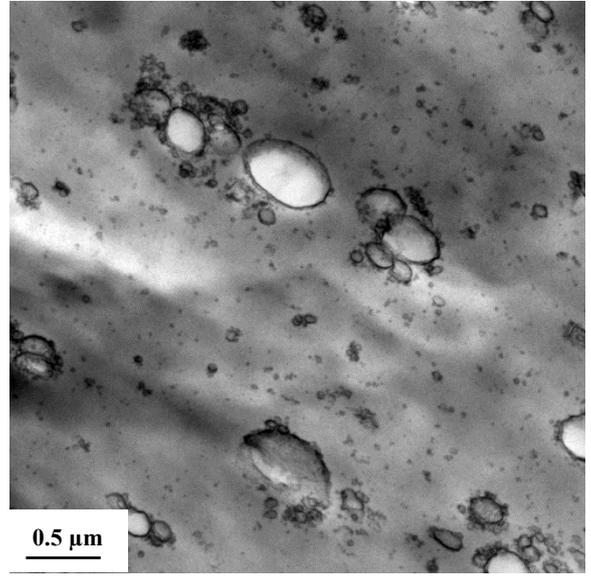
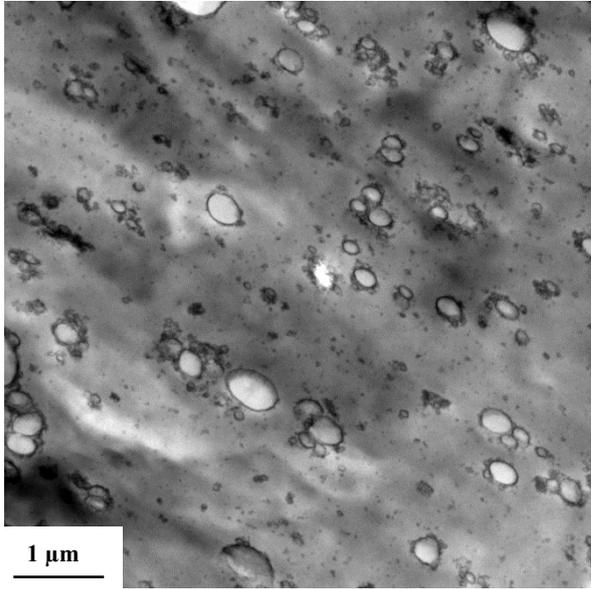
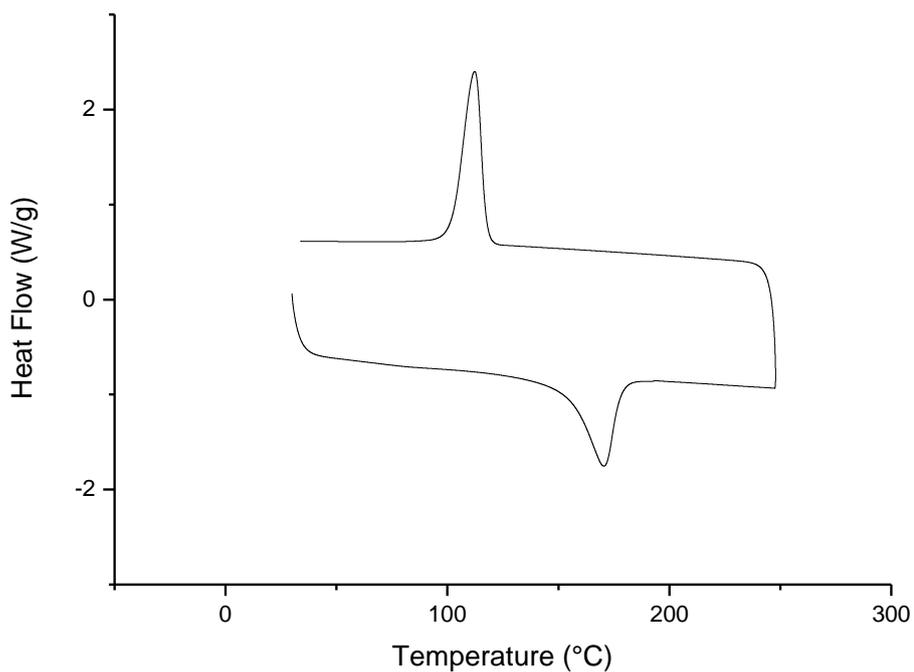


Figure S1 : TEM Images of PP+15wt%PP-g-MA+10wt%(DER671+NBDA)



Samples	ΔH_m (J.g ⁻¹)	T _g (°C)
Soluble part of PP+20wt%PP-g-MA+26wt% (DER671+DEH84) after Soxhlet extraction	65	Not visible
PP	84	Not visible

Figure S2 : DSC of the soluble part of the sample PP+20wt%PP-g-MA+ 26wt% (DER671+DEH84) after Soxhlet extraction in xylene

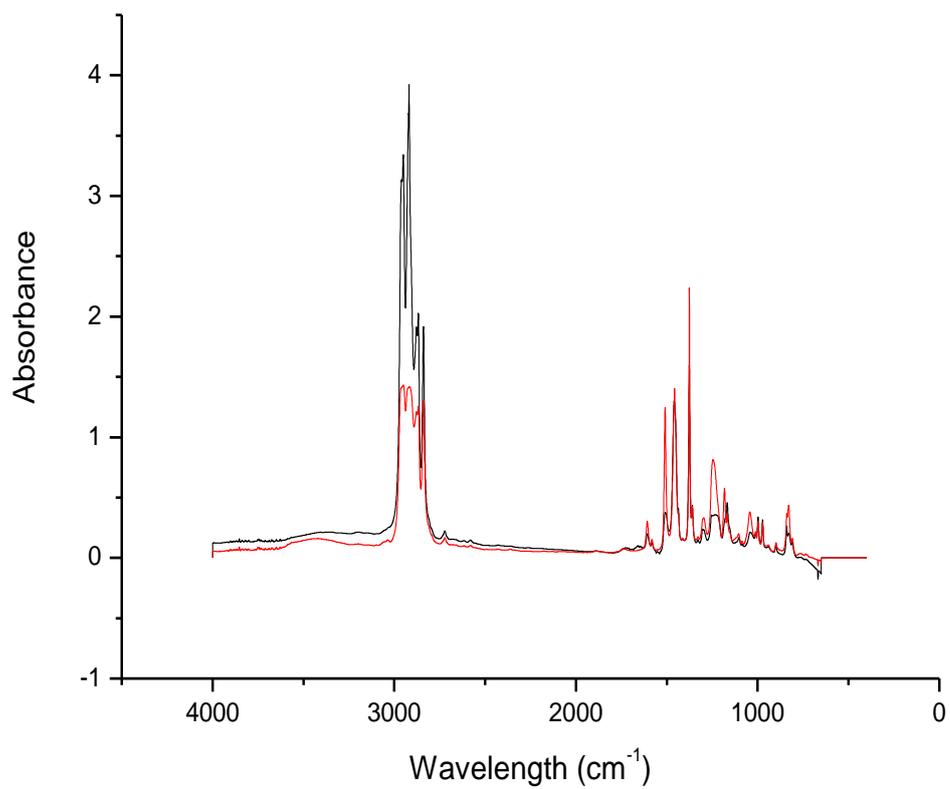
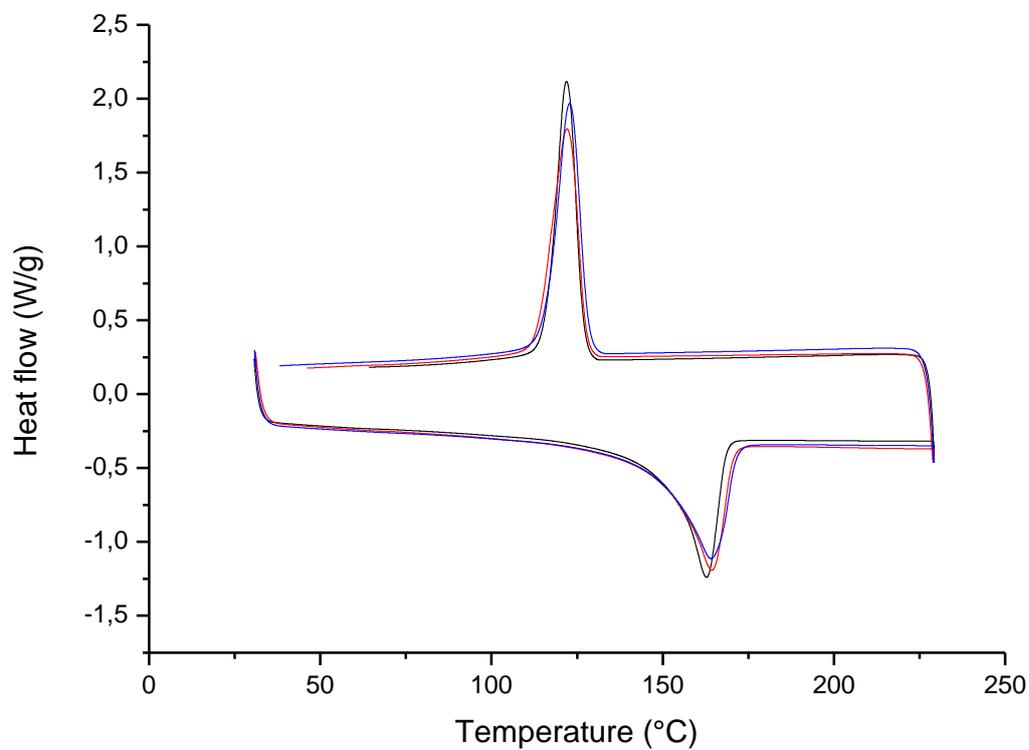


Figure S3 : FTIR spectra of PP+20wt%PP-g-MA+26wt%(DER671+DEH84) before (black) and after (red) Soxhlet extraction in xylene



Injection point (L/D)	ΔH_m (J.g ⁻¹)
17	74
32	76
42	77

Figure S4 : DSC of PP+15wt%PP-g-MA+10wt%(DER671+NBDA) with NBDA injected at L/D = 17 (black), L/D = 32 (red) and L/D = 42 (blue).

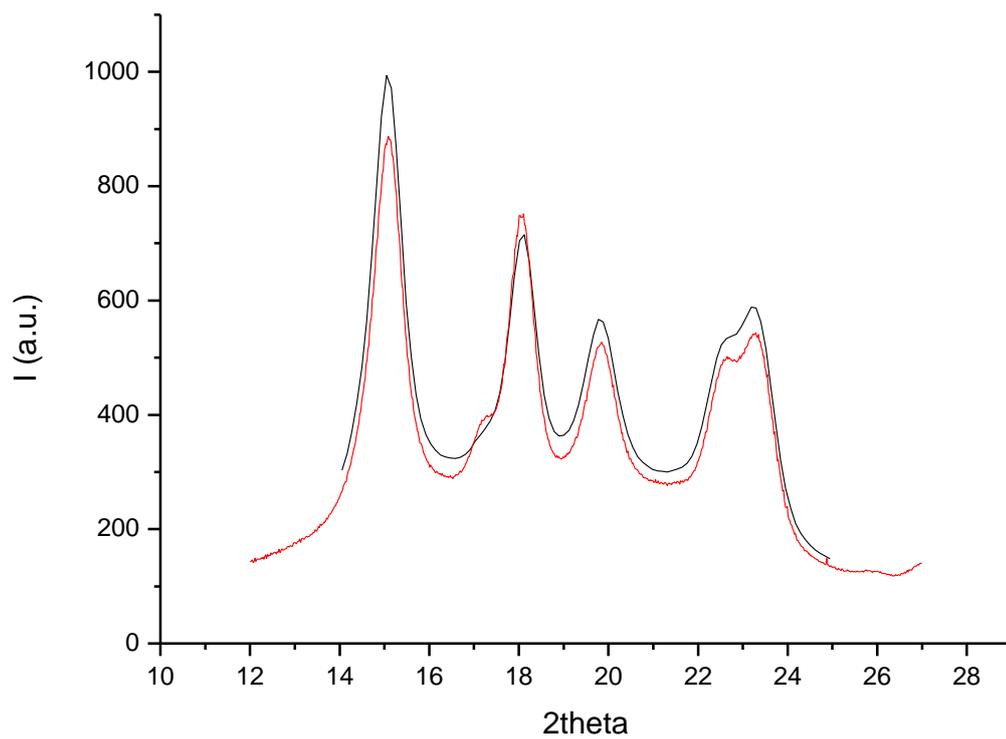


Figure S5 : XRD patterns of PP+26wt%(DER671+NBDA) (black) and PP+20wt%PP-g-MA+26wt%(DER671+NBDA) (red)