Supplementary Information for:

HIGHLY STRETCHABLE COMPOSITES FROM PDMS AND POLYAZOMETHINE FINE PARTICLES

Carmen Racles, Valentina Musteata, Adrian Bele, Mihaela Dascalu, Codrin Tugui, Ana-Lavinia Matricala

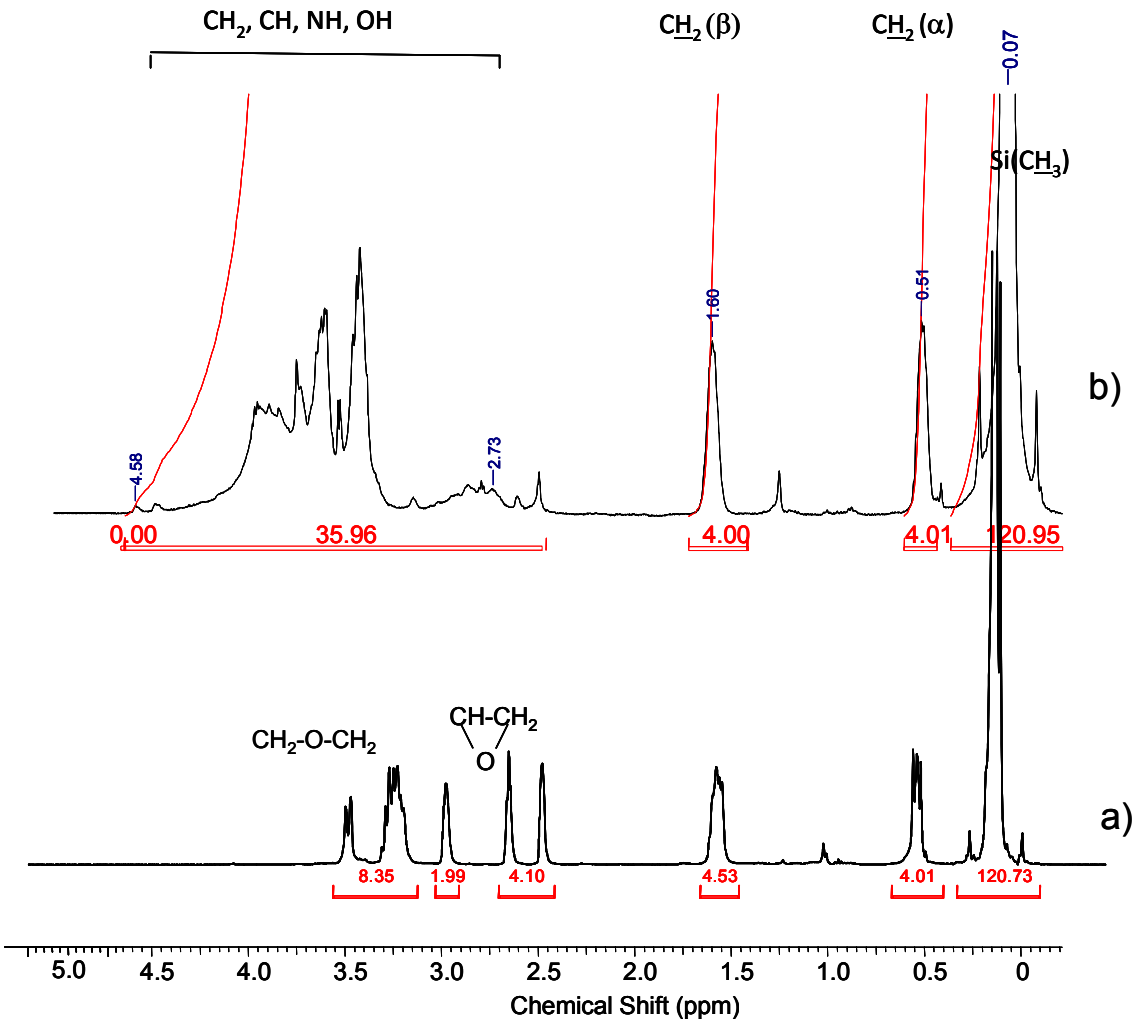


Figure 1S: H NMR spectrum of the glycidyl-oxi-propylsiloxane telechelic oligomer precursor (a) and of the corresponding tromethamol-modified polysiloxane used as particle stabilizer (b)

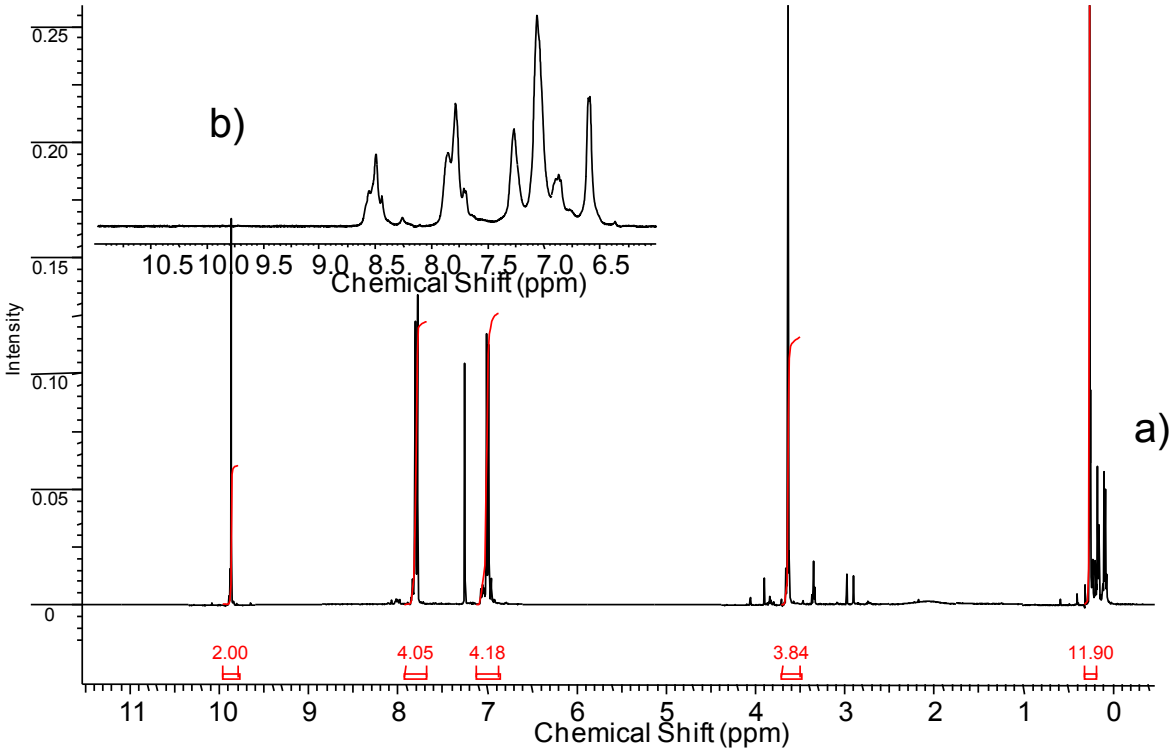


Figure 2S: H NMR spectrum of the siloxane dialdehyde (a) and the corresponding PAZ1Np (aromatic region, b)

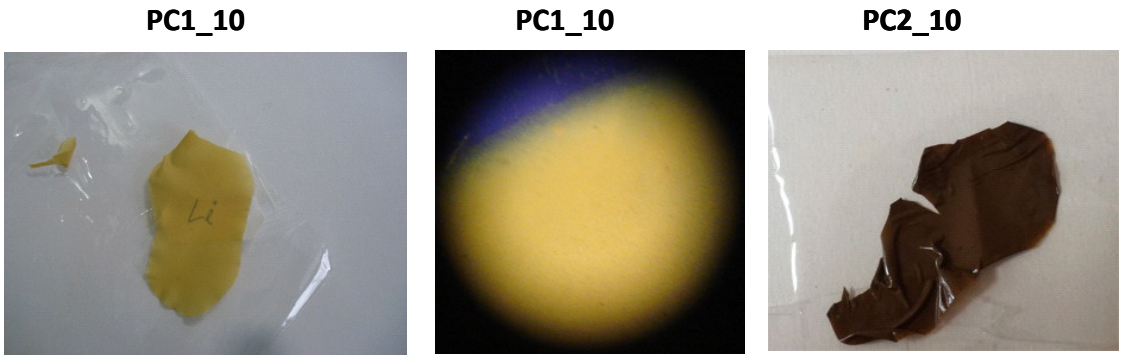
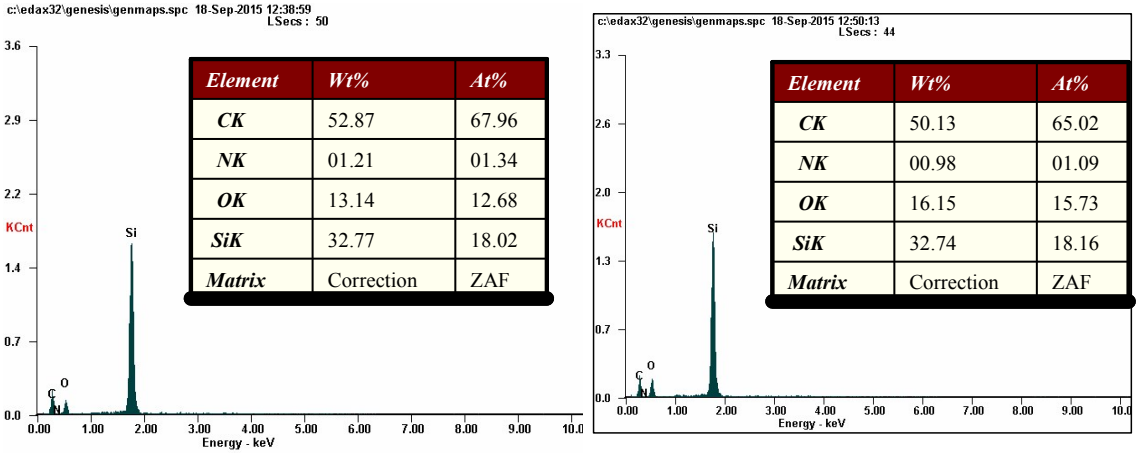


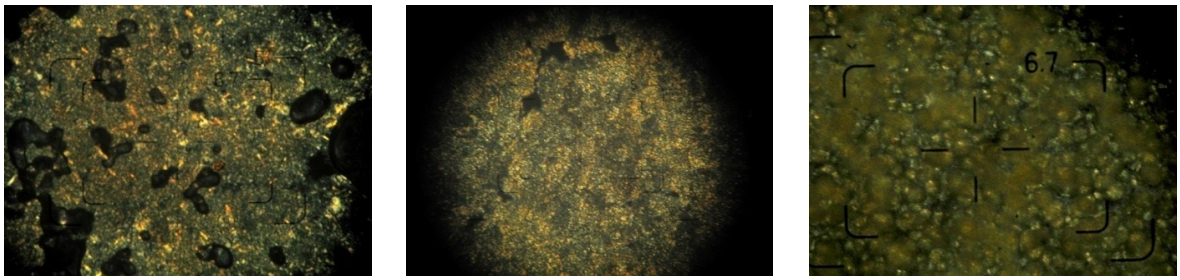
Figure 3S: Aspect of the composites films and optical microscope image (middle picture)



Element	Wt%	At%
CK	52.87	67.96
NK	01.21	01.34
OK	13.14	12.68
SiK	32.77	18.02
Matrix	Correction	ZAF

Element	Wt%	At%
CK	50.13	65.02
NK	00.98	01.09
OK	16.15	15.73
SiK	32.74	18.16
Matrix	Correction	ZAF

Figure 4S: EDX analysis on the surface of samples PC1_20 (left) and PC2_10 (right)



PAZ1 PAZ1 NP PC1_20

Figure 5S: Polarized light microscopy images of PAZ1 obtained in solution or as nanoparticles and of a composite film, at around 140°C

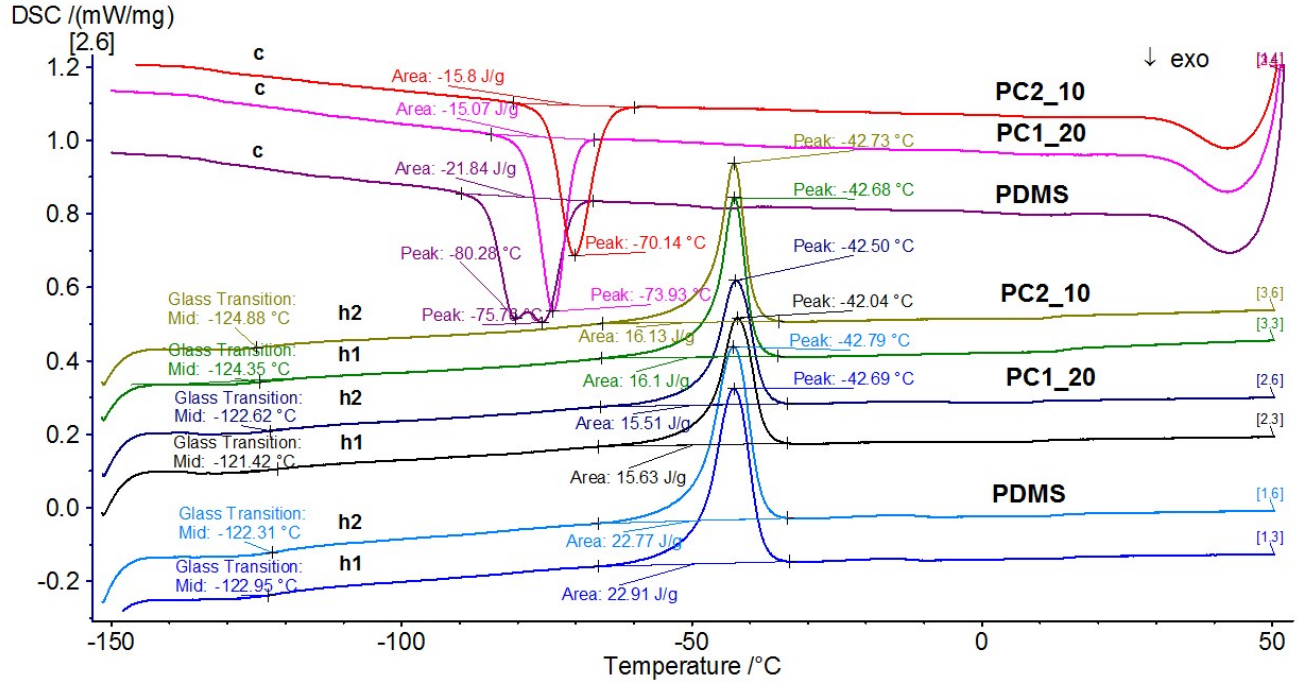


Figure 6S: DSC curves of two composites and the PDMS reference in the negative temperature range (h1, h2 – first and second heating; c –cooling scans)

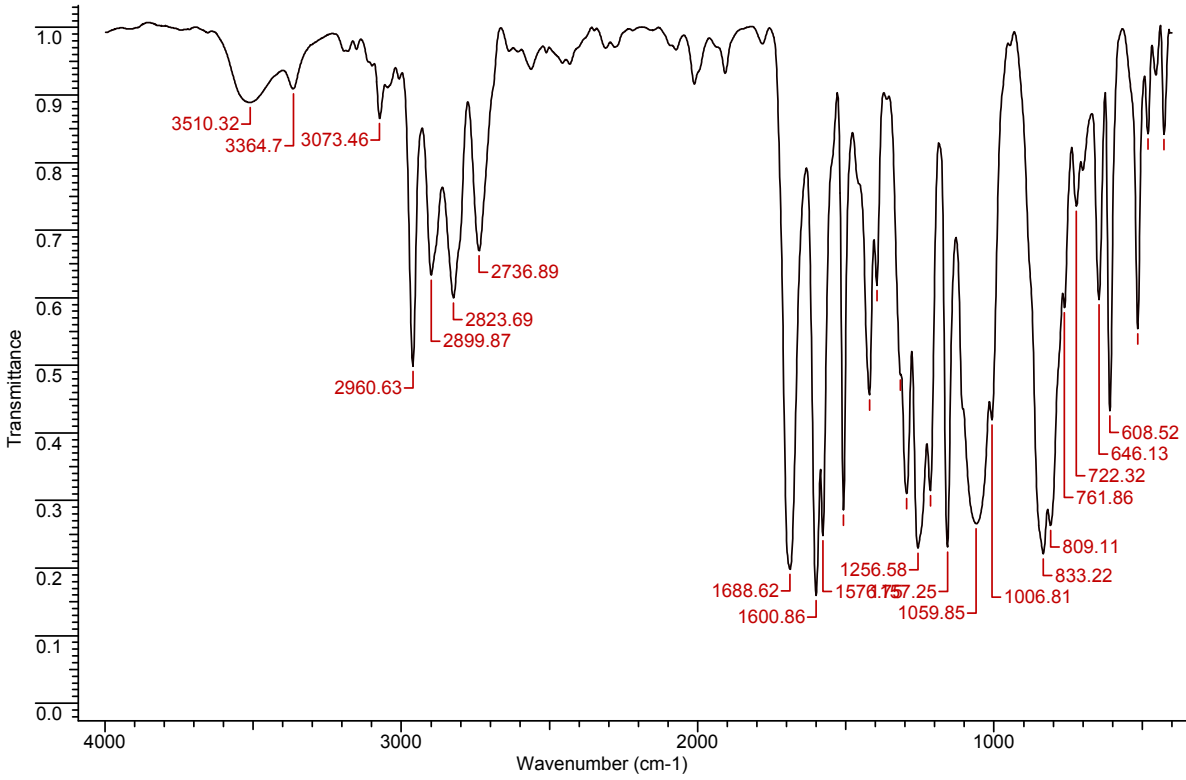


Figure 7S: FT-IR spectrum of the siloxane dialdehyde SDA