Structural and thermoanalytical characterization of 3D porous PDMS foam materials. The effect of impurities derived from a sugar templating process

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**Figure S1**. ATR-FTIR spectra of bulk PDMS, 3D-porous PDMS foam, PDMS-curing agent and PDMS-base backbone precursors.



**Figure S2.** ATR-FTIR spectra of bulk PDMS (a) and, 3D porous PDMS foam (b) after the materials were submitted to several steps of soaking and washing in hexane and ethanol. ATR-FTIR spectra were recorded after the materials were dried at 70 °C per 4 h.



**Figure S3.** FTIR spectra of evolved gas from (a) bulk PDMS and (b) 3D porous PDMS foam recorded at T=520°C and T=508 °C under N2 ﬂow at the main thermal decomposition step, respectively. Bulk PDMS and 3D porous PDMS foam samples correspond to as made samples.