

Supporting information

SEM images of MWCNT/SEBS composites without (A) and with surfactants (TX-100, CTAB and SDBS). The use of surfactants leads to individual filler dispersion instead of small clusters of MWCNT within SEBS matrices.

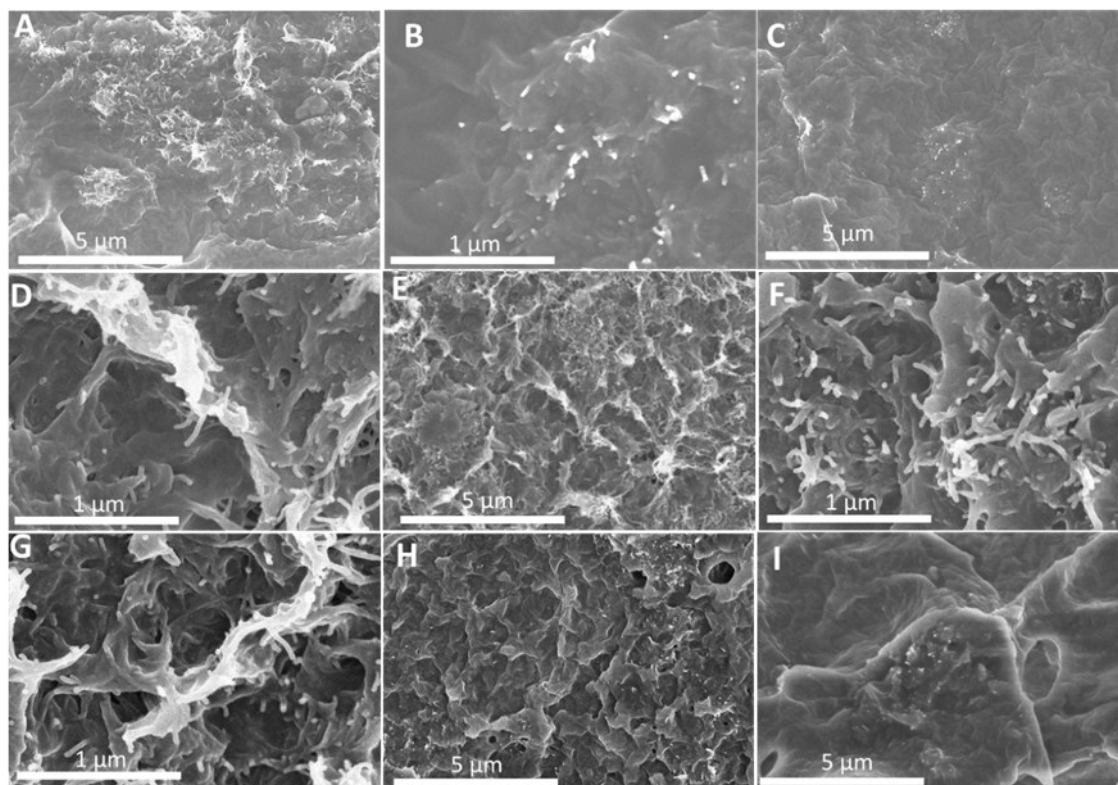


Figure S1- SEM images for MWCNT/SEBS composites with 2 wt% of CNT. Composites without surfactant (A) and with surfactant, in a 1:1 ratio of MWCNT/surfactant, for TX-100 (B) and (C), for CTAB (D) and (E) and for SDBS (G) and (H). Composites with 1:2 ratio of MWCNT/surfactant, for CTAB (F) and SDBS (I), respectively. The magnifications used are 10 000x and 50 000x.

FTIR spectra of MWCNT/SEBS composites with SDBS and CTAB as surfactant do not show any change in the absorption bands of the materials, for different filler contents or MWCNT/surfactant ratio.

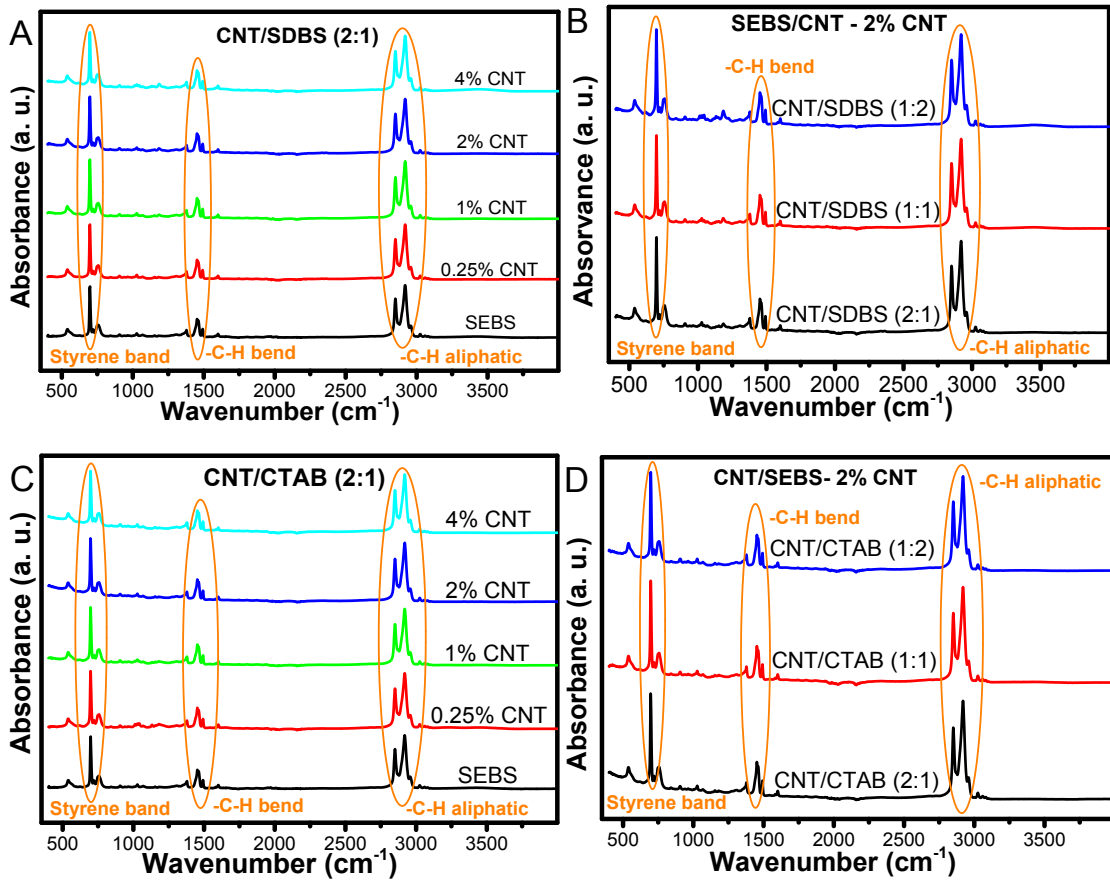


Figure S2- FTIR spectra for different composites as a function of the CNT content (A, C and E) and MWCNT/surfactant ratio (B, D and F) for the three surfactants used, T-X100, CTAB and SDBS.

The mechanical properties of the MWCNT/SEBS composites using SDBS and CTAB as surfactants are similar to that of pristine SEBS polymer. Maximum strain is larger than 400% for all composites.

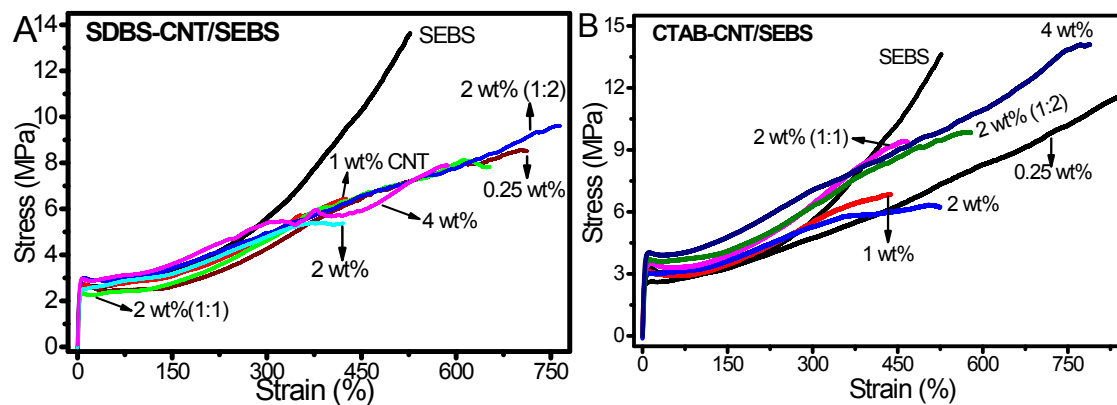


Figure S3 - Stress-strain response of the MWCNT/SEBS composites prepared using A) SDBS and B) CTAB.