**Supplementary Material**

**Enhancing properties and water resistance of PEO-based electrospun nanofibrous membranes by photo-crosslinking**

Parnian Kianfar1,#,\*, Alessandra Vitale1,#,\*, Sara Dalle Vacche1, Roberta Bongiovanni1

1Department of Applied Science and Technology, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129, Torino, Italy

# These authors contributed equally to the work

\* Corresponding authors: parnian.kianfar@polito.it, alessandra.vitale@polito.it

**Table S1** Crosslinking density ν of PEO/PEGDA and PEO/TMPTA photo-cured fibrous membranes by considering the membranes as plain films.

|  |  |
| --- | --- |
| Sample | ν  at 40 °C (10-3 mol/cm3) |
| L-PEGDA | 3.88 |
| M-PEGDA | 9.38 |
| H-PEGDA | 4.44 |
| L-TMPTA | 6.49 |
| M-TMPTA | 11.01 |
| H-TMPTA | 4.10 |



**Figure S1** DSC scans of PEO/crosslinker fibrous mats after photo-crosslinking.



**Figure S2** TGA thermograms of the uncured neat PEO polymer and of the fibrous PEO/crosslinker samples after photo-crosslinking.