Supplementary Information

1. The dynamic strain sweep measurements were carried out to determine a common linear viscoelastic region. As shown in Figure S1, the storage Modulus almost keep constant when the oscillation strain sweep from 0.08%~80%, which means the variation of storage modulus within the linear viscoelasticity. Here, 1.5% strain was chosen to ensure all frequency scans were carried out within the limits of linear viscoelasticity.

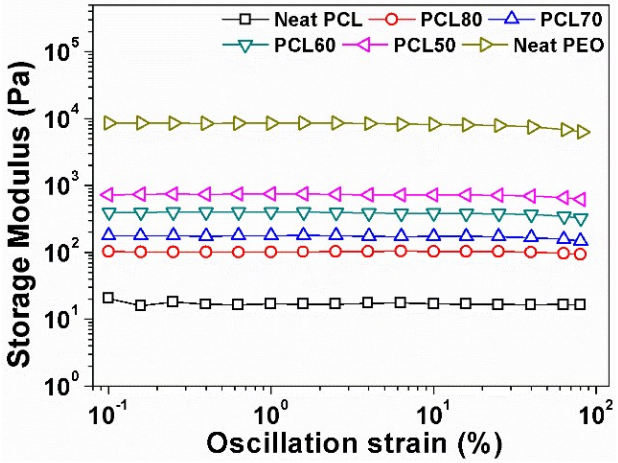

Figure S1. Oscillation strain sweep results

2. The efficient of PEO leaching process has been takin into account with this fabrication method. DSC tests were performed to detect the residual PEO phase and the results were displayed in figure S2. It was clear that after leaching PEO from PCL70 and PCL50 samples, the second peak of crystallinity associated with PEO phase disappeared, thus indicating that the PEO had been leached out to an extent not detectable by DSC. However, the melting peak of PEO can still be found in PCL80 and PCL60 foamed samples. Thus low leaching efficiency was possibly related to the fact that few PEO dispersed phases with small size were trapped in matrix PCL and it was hard to be leach out.

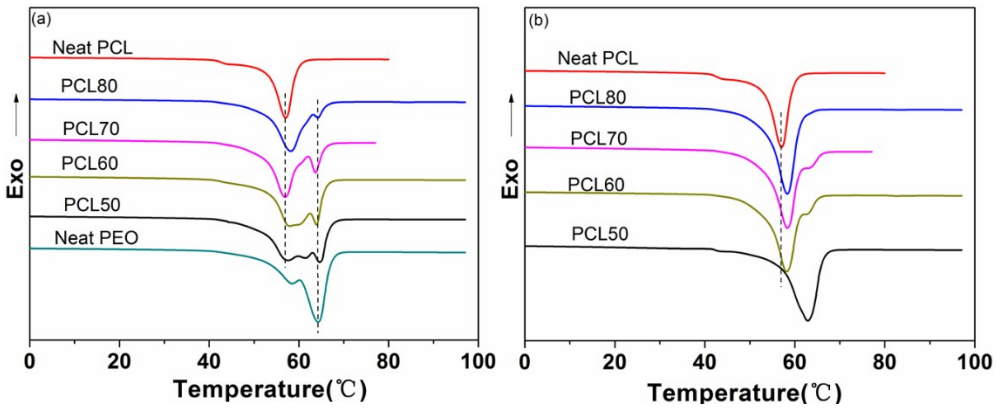

Figure S2. DSC melting curves (a) and foamed PCL scaffolds after leaching process (b)

3. Three points' dimensions of tubular scaffolds were measured. It was found from the Figure S3 and Table S1 that no big difference detected for ID, OD and wall thickness. Uniform tubular porous scaffolds were fabricated.

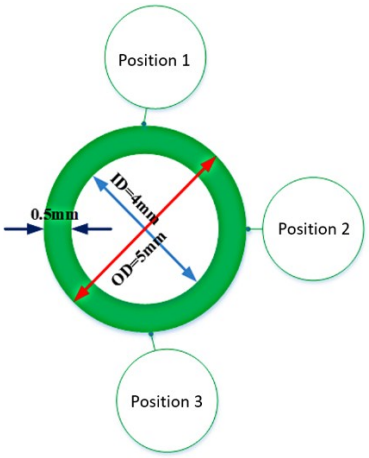

Figure S3. Positions of three measured points in porous scaffolds

Table S1. Statistical data of diameters and thickness at three points

Position	ID/mm	OD/mm	Wall thickness /mm
1	4±0.20mm	5±0.18mm	0.5±0.04mm
2	4±0.22mm	5±0.23mm	0.5±0.03mm
3	4±0.18mm	5±0.20mm	0.5±0.05mm

4. Figure S4 showed the DSC cooling curve for the PCL/PEO blends before leaching process. It can be found that Tc of PCL and PEO is 24 ℃ and 44℃, respectively.

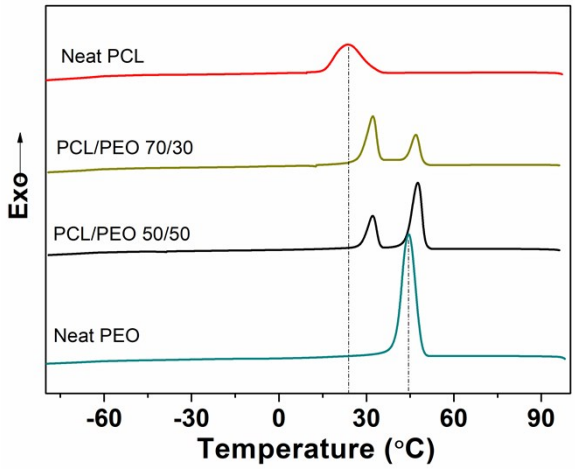

Figure S4. DSC cooling curves of neat PCL, neat PEO and PCL/PEO blends