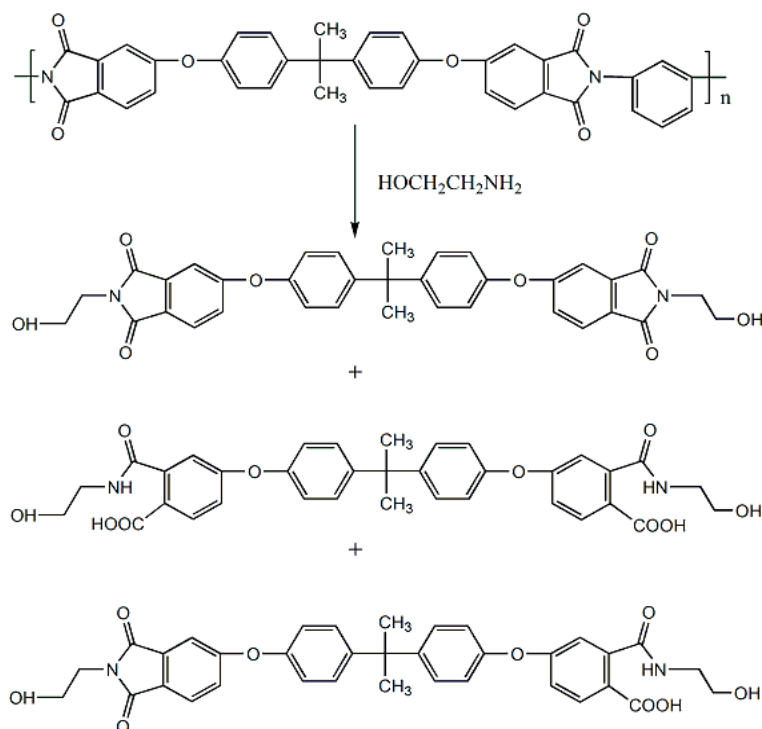


**Table S1.** Mass loss rate of the fibers with different extraction times.

extraction time (h)	Pre-extraction mass (g)	After extraction mass (g)	Mass loss rate (%)
3	0.362	0.172	52.5
6		0.165	54.4
9		0.160	55.8
12		0.162	55.3
24		0.159	56.0

<sup>1</sup>When PEI is completely extracted, the theoretical mass loss rate is 60%.



**Figure S1.** Decomposition reaction mechanism of PEI in the extraction solution.



**Figure S2.** The cross-section of PEEK/PEI hollow fiber by optical microscope (100×).