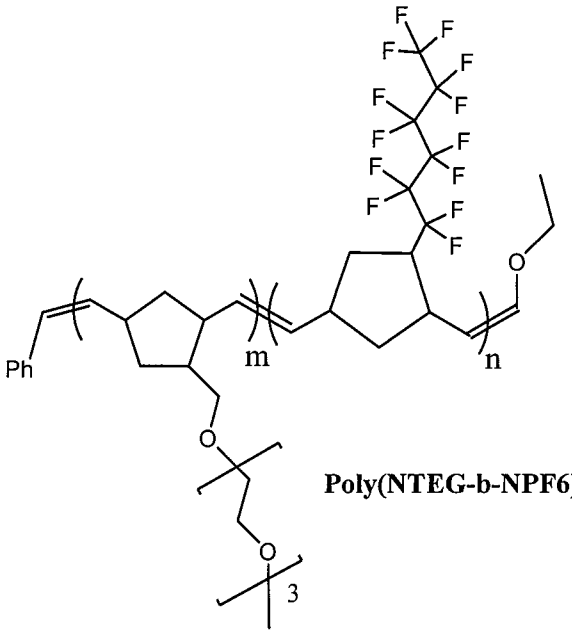
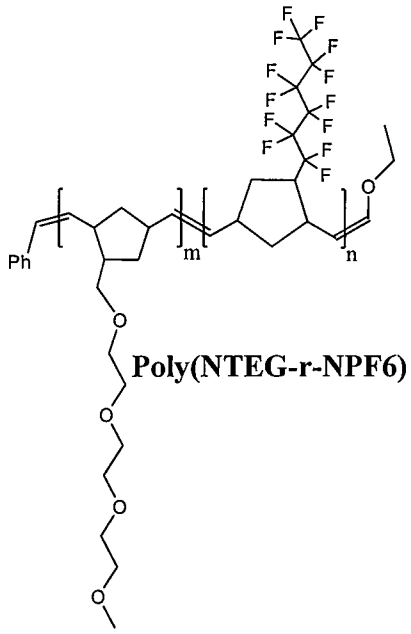
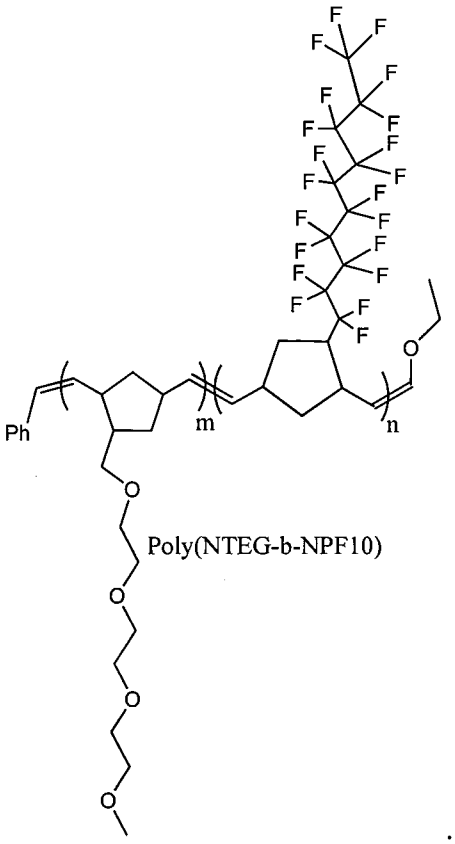


Poly(NTEG-b-NPF6)



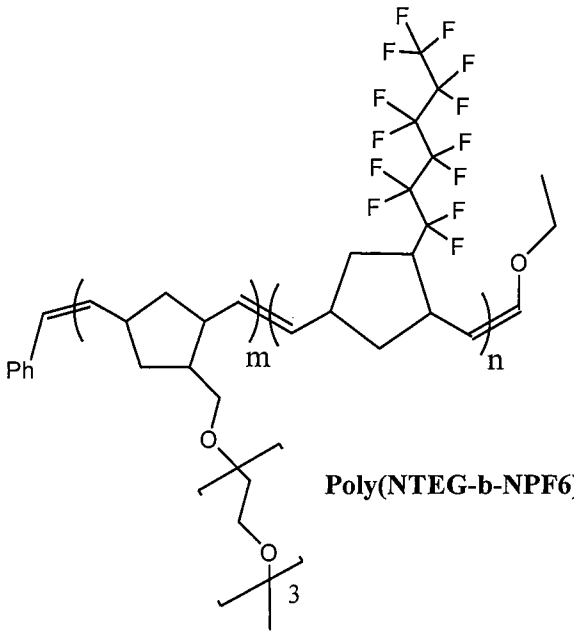
Poly(NTEG-r-NPF6)

, or



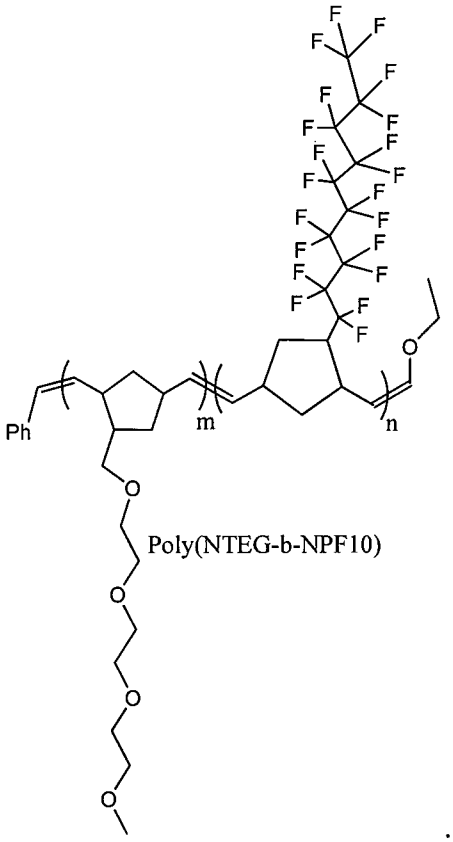
Poly(NTEG-b-NPF10)

4. The composite hydrophilic porous membrane of claim 3, wherein the copolymer is a block copolymer of the formula:



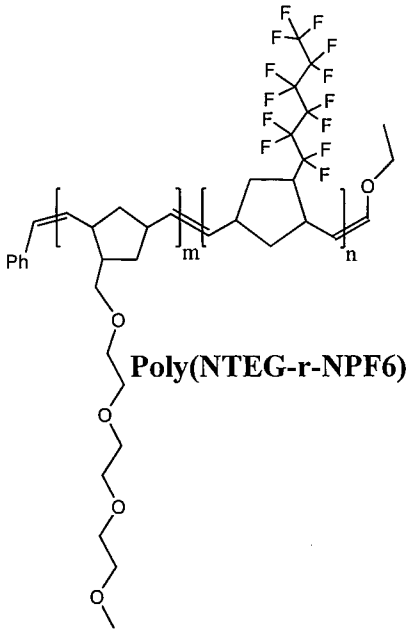
Poly(NTEG-b-NPF6)

or



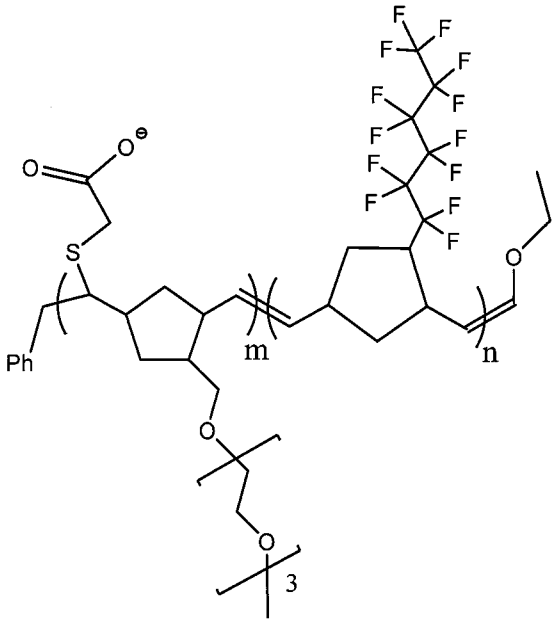
Poly(NTEG-b-NPF10)

5. The composite hydrophilic porous membrane of claim 3, wherein the copolymer is a random copolymer of the formula:

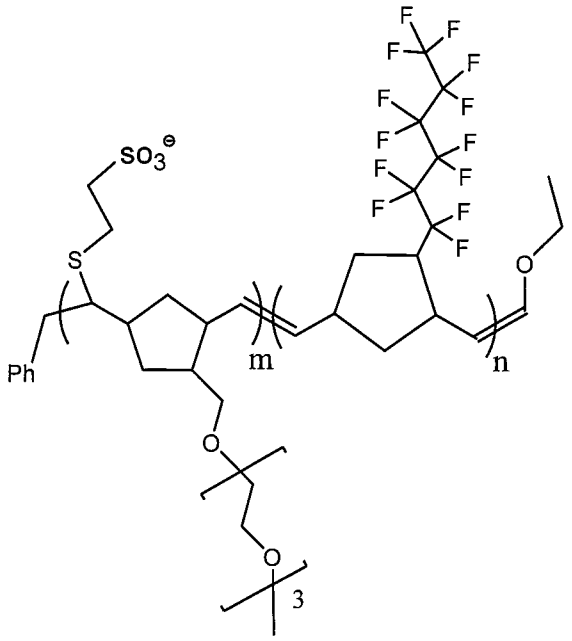


Poly(NTEG-r-NPF6)

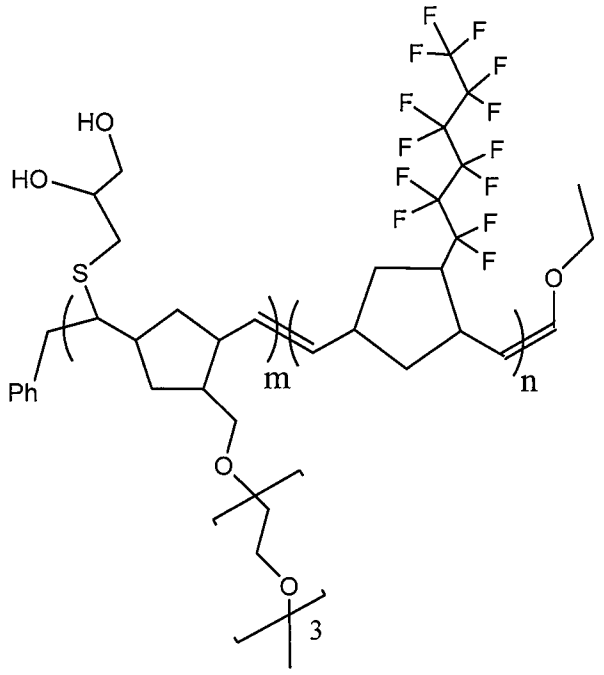
6. A composite hydrophilic porous membrane comprising a porous fluoropolymer support and a coating comprising a copolymer, wherein the copolymer



, **Poly(NTEG-b-NPF6)/MAcOH** ,



Poly(NTEG-b-NPF6)/MeSNa ,



or **Poly(NTEG-b-NPF6)/Thioglycerol** .

14. The composite hydrophilic porous membrane of any one of claims 1-9, wherein the porous fluoropolymer support is selected from PTFE, PVDF, PVF (polyvinyl fluoride), PCTFE (polychlorotrifluoroethylene), FEP (fluorinated ethylene-propylene), ETFE (polyethylenetetrafluoroethylene), ECTFE (poly ethylenechlorotrifluoroethylene), PFPE (perfluoropolyether), PFSA (perfluorosulfonic acid), and perfluoropolyoxetane.

15. A method of filtering a fluid, the method comprising passing the fluid through the hydrophilic porous membrane of any one of claims 1-9.

16. The composite hydrophilic porous membrane of any one of claims 1-9 or 14, which is configured in a planar, flat sheet, pleated, tubular, spiral, or hollow fiber configuration.