CLAIMS

1. A porous ABPBI (Phosphoric Acid Doped Poly(2,5-benzimidazole)) membrane wherein the membrane is stable to acids, bases, organic solvents and autoclaving.

2. The membrane of claim 1, wherein the membrane is stable to organic solvent comprising protic solvent, aprotic polar solvent, or non polar solvent.

3. The membrane of claim 1, wherein said membrane is stable in concentrated inorganic acids.

4. The membrane of claim 3, wherein the concentrated acid is 25 N sulfuric acid.

5. The membrane of claim 1, wherein said membrane is stable in concentrated base solutions.

6. The membrane of claim 5, wherein the concentrated base is 2.5N sodium hydroxide.

7. The membrane as claimed in claim 1, wherein the concentration of ABPBI is up to 15%.

8. The membrane as claimed in claim 1, wherein the membrane is configured to be used for separations of solute from solvents selected from acids, bases, organic solvents, or mixtures thereof.

CLAIMS

1. A porous ABPBI membrane prepared by phase inversion process using its dope solution wherein ABPBI concentration is upto 15 % and is casted on support selected from the group consisting of glass, polyester, polypropylene, polyethylene, polyetheretherketone, metallic plates and ceramics.
2. The membrane of claim 1, wherein said membrane is stable to acids, bases, organic solvents and autoclaving.
3. The membrane of claim 1, wherein the membrane is stable to organic solvent comprising protic solvent, aprotic polar solvent, or non polar solvent.
4. The membrane of claim 1, wherein said membrane is stable in concentrated inorganic acids.
5. The membrane of claim4, wherein the concentrated acid is 25 N sulfuric acid.
6. The membrane of claim 1, wherein said membrane is stable in concentrated base solutions.
7. The membrane of claim 6, wherein the concentrated base is 2.5N sodium hydroxide.
8. The membrane as claimed in claim 1, wherein the membrane is used for separations of solute from solvents selected from acids, bases, organic solvents, or mixtures thereof.