

**IMPROVED METHOD FOR MAKING SULFONATED BLOCK COPOLYMERS,
METHOD FOR MAKING MEMBRANES FROM SUCH BLOCK COPOLYMERS
AND MEMBRANE STRUCTURES**

The present invention relates to an improved method for making sulfonated block copolymers and to methods for making membranes from such block copolymers. In particular, the present invention relates to an improved method for making sulfonated block copolymers having at least two polymer end blocks that are resistant to sulfonation and at least one polymer interior block that is susceptible to sulfonation where the sulfonation agent is C₂ to C₈ acyl sulfate. In the improved process the residual carboxylic acid formed from the C₂ to C₈ acyl sulfate is converted to C₁ to C₄ alkyl esters by contacting the residual carboxylic acid with at least a 0.9: 1 molar ratio of a C₁ to C₄ alcohol to residual carboxylic acid, resulting in an improved sulfonated block copolymer solution. The present invention further relates to the use of such sulfonated block copolymer solutions to prepare various membranes and other articles.

Fig. 3