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Sodium polymer electrolytes composed of sulfonated polysulfone and macromolecular/molecular solvents for Na-batteries

C.S. Martinez-Cisneros^{1*}, C. Antonelli², B. Levenfeld¹, A. Varez¹, J.Y. Sanchez^{1,3*}

¹ Materials Science and Engineering Department, University Carlos III of Madrid, Spain.

² Univ. de Montpellier, Institut Européen des Membranes, UMR 5635, CNRS, ENSCM, Place Eugene Bataillon, F-34095 Montpellier, France.

³ UJF UdS, Grenoble INP, LEPMI, UMRCNRS5279, 1130 Rue Piscine, BP75, F-38402

S^t Martin d'Hères, France.

*corresponding authors: cymartin@ing.uc3m.es; jeasanch@ing.uc3m.es

Abstract

Polysulfone acidic ionomers have been extensively used as Fuel Cell membranes, mainly because of their mechanical, thermal, chemical and electrochemical stability as well as their excellent film-forming capability. This contribution deals with the development of blends based on polysulfone-sodium sulfonate and macromolecular/molecular solvents, consisting of poly(oxyethylene), POE, and propylene carbonate, PC, respectively. The objectives were to take advantage both of the thermomechanical performances and of the macromolecular polyanions provided by the polysulfone ionomer. Combining POE/PC solvents, didn't allow obtaining sufficient

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