

عنوان مقاله:

The effect of TEOS as crosslinking agent upon membrane property of blending of PDMS and PES membranes

محل انتشار:

دومین کنفرانس بین المللی یافته های نوین پژوهشی در شیمی و مهندسی شیمی (سال: 1395)

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خلاصه مقاله:

In this research blending of PDMS (polydimethylsiloxane) and PES (poly ether sulfonic) membranes with crosslinking TEOS (tetra ethyl ortho silicate) as silica Nano particles, ammonia as catalyst/inducer, and span 80 as surfactant. In this research, variation of crosslinking agent (TEOS) upon crosslinking density (v_e), swelling degree (MsD), %swelling by volume, density of membrane specimen (ρ_p), volume fraction of rubber phase (v_2) and number average molecular weight between crosslink's (M_c), is studied. It was observed that with increase weight of the crosslinking agent, v_e , ρ_p and v_2 , is increase and MsD, %swelling by volume and M_c is decrease.

کلمات کلیدی:

PDMS, PES, TEOS, crosslinking density, crosslinking agent, swelling degree

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