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## **Preparation EVA Nano Filtration Membrane by Thermal-wet Phase Inversion Process**

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In this research EVA membranes with 28% vinyl acetate composition were fabricated by wet-thermal phase inversion of EVA/THF solution. EVA with 28% vinyl acetate was dissolved in THF at 50C, and then was cast on the flat glass plate at room temperature. The cast solution was transferred to coagulation bath. The effect of different preparing process conditions like Temperature of coagulation bath, Composition of polymer solution, Preliminary drying time and Thickness of cast polymeric film on the structural characteristics of prepared membranes were investigated using scanning electron microscopy (SEM). SEM results show that by increasing the Temperature of coagulation bath and Preliminary drying time the porosity of membranes decreased and asymmetric Nano porous integrally skinned morphology with porous substrate for some prepared membranes investigated.