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**DEVELOPMENT OF POLYMERS MEMBRANES FROM PA6/HDPE BLENDS BY PHASE INVERSION METHOD**

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Currently the use of polymers membranes has grown considerably, so research in this area has been following this development. Has been seeking alternatives for the separation processes not only for the economic and environmental issues. The use of polymer blends to obtain membranes appears to be differential, since we can add features such as processing, improvement of properties and low cost. This study were prepared blends of polyamide (PA6) and polyethylene (HDPE) in various compositions in twin-screw extruder counter-rotate, 240 ° C and 50 rpm. Observed the use of various compatibilizers due to immiscibility of the system PA6/HDPE. The method of preparation of the membranes was phase inversion that is one of the most currently used, stood out for its simplicity of operation and technical feasibility. The characterization by SEM indicated the presence of pores characteristic of microfiltration membranes and each component directly influences the structure of the material. You can also verify a correlation between chemical reactivity of the systems and performance of the membrane.