

Journal of Applicable Chemistry

2016, 5 (1): 255-265 (International Peer Reviewed Journal)



Membrane Mediated Organocatalyst Separation Methodology

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Accepted on 9th January 2016

ABSTRACT

Membranes were fabricated by Ring Opening Metathesis Polymerization (ROMP) of dicyclopentadiene with Grubbs catalyst. Organocatalysts were separated from organic molecules using these membranes. Acid or base was added to organic catalysts that increased the critical area of the organic catalysts to the size range (>0.5 nm²) where membranes could retain them. The catalysts were too small to be retained by themselves, but the salts were in the range where PDCPD membranes could retain them.

Keywords: Membrane, Organocatalyst, critical area, separation.