

PREPARATION OF STABLE SULFATED ZIRCONIA TO CATALYSIS

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Resumo

The formation of the stable sulfated- zirconia, consists of the impregnation of zirconium soaked in silica mesoporous (MCM-41) with sulfuric acid. Its activation depends of the calcination with a temperatura of approximately 750°C. The catalysis of preparation studied was with two concentrations, of 1,3 and 4% WT. After a thermal activation, the two concentrations obtained 0,15 and 0,69% WT of sulfate ions retained on the zirconia surface. This catalyst is responsible for catalyzing the formation of biodiesel from oleic acids and methanol at 75°C and a mean residence time of five hours. This experiment can demonstrate the only way to obtain this catalyst without the leaching of sulfate species.

The conversion of this catalyst can reach 98%.

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