

Hydroprocessing of pure soybean oil for production of second generation biodiesel

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Hydroprocessing of pure soybean oil is a prominent technology for the production of next generation biodiesel. In this work, we compares the conversion and paraffin content of hydroprocesed pure soybean oil under ideltical conditions in the batch reactor. The conversion was calculrated by simulated distillation gas chromatography and the paraffin was calculrated by gas chromatography. The effects of reaction time, initial hydrogen pressure and reactor temperature are investigated using various heterogeneous catalyst. The experiment results show that higher n-alkane content and the conversion is obtained at 400°C, 2h, 92 bar for the pure soybean oil.