

Preparation of biodiesel using supercritical methanol in batch reactor system

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The transesterification of RBD (refined, bleached, deodorized) palm oil was investigated by using supercritical methanol in batch reactor. This work has been studied in various temperatures (200–346 °C), pressures (50–400 bar), the ratios of methanol to RBD palm oil (5–80) and reaction times (0.5–30 min). The contents of FAMES (fatty acid methyl esters) were analyzed by gas chromatography using a British standard methods. This results were comparing with tubular flow reactor results. And the corresponding experimental data in batch reactor have been fitted by kinetic model.