

### Side reactions during the synthesis of biodiesel fuel in supercritical fluid

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Using supercritical fluid in the synthesis of biodiesel fuel enables an efficient and compact process compared with the conventional process. However, due to high temperature and pressure, some side reactions can occur to produce unexpected byproducts. In this study, the byproducts formed during biodiesel synthesis in supercritical fluid were characterized. In addition, the effect of several parameters on the side reactions was investigated. As a result, the composition of byproducts and the aspect of side reactions can be obtained.