



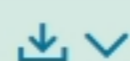
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**Abstract:** Biological aviation kerosene was produced by one-step catalytic hydrotreatment of waste lard oil over Pt/SAPO-11 in a high-pressure fixed bed micro reactor. The influence of reaction conditions such as temperature, pressure, hydrogen oil ratio, and space velocity on the deoxygenation rate, the selectivity of C8-C16hydrocarbons and the isomerization rate of C8-C16hydrocarbons have been investigated. The experimental results showed that the temperature of 400°C, pressure of 5 MPa, hydrogen oil ratio of 1000 and space velocity of 1.2 h<sup>-1</sup>were the best experimental reaction conditions. Under these conditions, the conversion rate is 96.62%, the selectivity of C8-C16hydrocarbons is 50.25%, and the isomerization rate of C8-C16hydrocarbons is 35.68%.

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**Main heading:** [Kerosene](#)**Controlled terms:** [Batch reactors](#) - [Hydrocarbons](#) - [Hydrogen](#) - [Hydrogenation](#) - [Isomerization](#) - [Isomers](#)**Uncontrolled terms:** [Catalytic hydrogenation](#) - [Catalytic hydrotreatment](#) - [Conversion rates](#) - [Deoxygenations](#) - [Fixed bed micro-reactor](#) - [High pressure](#) - [Reaction conditions](#) - [Space velocities](#)**Classification code:** [523](#) Liquid Fuels - [802.1](#) Chemical Plants and Equipment - [802.2](#) Chemical Reactions - [804](#) Chemical Products Generally - [804.1](#) Organic Compounds**Database:** Compendex[Linda Hall Library document delivery service](#)

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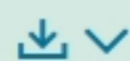
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