

BIODIESEL PRODUCTION

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ABSTRACT

Biodiesel is an alternative fuel that can be produced from any animal fat, vegetable oil and used cooking oil. The analysis of some biodiesel fuel properties shows that rape seed and sunflower oil with low content of saturated fatty acid are highly recommended. Rapeseed oil can be produced in decentralized small-scale plants or in central large-scale plants. Biodiesel fuels are produced through a process called transesterification, in which various oils or fats are converted into alcohol ester through a chemical reaction with an alcohol in the presence of a catalyst. Since biodiesel is a renewable fuel, an opportunity exists to reduce greenhouse gas emissions when compared to nonrenewable petroleum diesel.

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