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A BRIEF DESCRIPTION ON BIODIESEL

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ABSTRACT

Continuous usage of fossil fuels (non-renewable natural resources) is rapidly diminishing, and their combustion is causing an increase in carbon dioxide in the atmosphere. For environmental and economic sustainability, renewable carbon-neutral transportation fuels are needed. Biodiesel made from oil crops has the potential to be a carbon-neutral sustainable alternative to petroleum-based fuels. It is mainly generated via direct usage and mixing, microemulsions, thermal cracking (pyrolysis), and transesterification, and is made up of monoalkyl esters of long-chain fatty acids. Transesterification of vegetable oils and animal fats is the most prevalent technique for producing biodiesel. Batch procedures, supercritical processes, ultrasonic techniques, and microwave methods are all accessible for the transesterification reaction. Water content of oils or fats and free fatty acids, molar ratio of glycerides to alcohol, catalysts, reaction duration, and reaction temperature are all variables that affect the transesterification process. The significance, history, characteristics, suppliers, and methods for producing biodiesel are discussed in this study.

KEYWORDS: *Alternate Fuel, Biodiesel, Renewable, Transesterification, Vegetative Oil.*

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