BIODIESEL PRODUCTION AND FUEL QUALITY-REVIEW

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ABSTRACT

Biodiesel processing and quality are closely related. The processes used to refine the Feedstock and convert it to biodiesel determine whether the fuel will meet the applicable Specifications. The emphasis will be on processing as it is conducted in the United States, where most biodiesel is produced by reacting soybean oil or used cooking oils with methanol and the standard for fuel quality will be ASTM D 6751-02.high energy demand and increased environmental pollution related problems due to rampant use of fossil fuels have necessitated the development and adaptation to renewable and ecofriendly fuels. Biodiesel is one such initiative which has been projected as ecofriendly and renewable alternative to diesel fuel. Biodiesel of acceptable quality can easily be produced by ED3R Esterification process. Fuel properties of biodiesel fuel produced vary with the source of feedstock used. Biodiesel is one such initiative which has been projected as ecofriendly and renewable alternative to diesel fuel. This paper will describe the processing and production of biodiesel and how this determines fuel quality.

KEYWORDS: Specification, Soya bean oil, Trans-esterification, ASTM D method.