

# COMMERCIAL AND SYNTHESIZED ADDITIVES FOR BIODIESEL FUEL. A REVIEW

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## **ABSTRACT**

In this paper a classification and analysing of commercial and synthesized additives used with biodiesel by different researchers was conducted. Biodiesel is widely accepted as an alternative fuel comparable to petroleum diesel in compression ignition engines. It is relatively poor cold flow property is a characteristic which limits its application. Here, fuel additives become the most viable choice not only to decrease this drawback but also to produce specified products that meet international and regional standards. This article covers a deep and through literature review of the effect of different additives on biodiesel properties, engine performance, and emission characteristics. The additives usage in biodiesel is inseparable both for improving the cold flow properties and for better engine performance and emission control. It can be concluded from the literature that specific additives for biodiesel remain at their infancy. Further research is needed to develop biodiesel specific additives.

**Keywords:** Biodiesel • Commercial additives • Fuel properties • Engine performance • Emission •