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(57) Abstract :

ABSTRACT AN IMPROVED COMPOSITION FOR THE PREPARATION OF BIODIESEL AND A PROCESS THEREOF The present invention provides a composition and a process for the preparation of biodiesel. The present invention provides the composition and the process for the preparation of biodiesel which comprises of oil in Gamma irradiated seeds (CS), a Waste oil (WO), a Low carbon Alcohol (Al), a Catalyst (C). The present invention utilizes a blend of gamma irradiated castor seeds and waste oil as the raw material that undergoes simultaneous extraction and transesterification in the presence of alcohol and catalyst, resulting in the formation of biodiesel as a product and glycerin and squalene as byproducts. The present process substantially improves the reaction kinetics and the physicochemical properties of the prepared biodiesel and thereby substantially increases the yield of the invention.

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