

# Biodegradability and Mechanical Studies of Natural Polymers with Polyolefin

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## ABSTRACT:

Biodegradable polymer have been attracting much attention owing to concerns related to environmental pollution by plastic waste. As a result attempts have been made to solve this problem by blending natural polymer into synthetic polymer. Polymer blends are capable of providing material which extent the useful properties beyond the range that can be obtain from single polymer equivalents. The melt blending of LDPE/HDPE/PP with different proportion of starch and pectin has been studied individually. The melt blending was carried out using twin screw extruder which was followed by injection moulding process. Various mechanical, chemical and biodegradable tests carried out for this blend.

**Keywords:** Natural polymer, polyolefin, biodegradation, mechanical properties