

## Investigation into the Possibility of Using Recycled Polyethelene to Replace Natural Rubber in the Production of Different Products

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**Abstract :** This work investigates the possibility of using recycled polyethylene LDPE as a base polymer in production of different products (shoe sole, foot mat, and many more) using carbon black as a filler to improve its mechanical properties, like hardness, tensile stress properties and elongation at break properties, from the result so far gotten there is a possibility that there is an increase in the mechanical properties of the sample compare to natural rubber sample.

**Keywords :** recycled polyethylene, base polymer, hardness, stress properties

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