

**CHARACTERIZATION OF IRRADIATED LOW DENSITY
POLYETHYLENE COMPOSITE WITH CHARCOAL BLACK
PIGMENT**

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In this work we have characterized low density polyethylene composite with charcoal black pigment non-irradiated and irradiated with electron beam. At first the composite was prepared by the incorporation of charcoal black pigment in low density polyethylene (LDPE). The incorporation of the pigment into the polymer matrix during the injection process was easy, its distribution was homogenous. Regarding the irradiated samples it can be said that there was an improvement in the majority of the properties, previously studied. Depending on the type of piece to be manufactured and which properties are more important, it can be concluded that the composite of LDPE with charcoal black pigment can be irradiated with more suitable doses.