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CHARACTERIZATION OF THE LINEAR LOW DENSITY POLYETHYLENE (LLDPE) GRAFTED WITH FLUOROCARBONS BY GAMMA IRRADIATION

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The use of the gamma irradiation for modification of commercial polymer, adding some monomer, to give new physical-chemistry and mechanical properties, it is denominated graft, largely studied technique. This technique consists of promoting the appearance of free radicals, through irradiation, with the scission of the polymer chain and contact with the monomer, reacting and forming ramifications. The copolymer was obtained by irradiation linear low density polyethylene (LLDPE) with monomer fluorocarbons followed by grafting in polymeric matrix (LLDPE). The specimens were studied using Fourier transform infrared spectroscopy (FTIR), differential scanning calorimetry (DSC), thermogravimetric analysis (TGA) and differential thermogravimetry (DTG).