聚丙烯摻雜鎳粉之抗靜電性與流變性質

In this study, the electrically conductive filler (nickel powder) was blended with polypropylene by use of the Brabenda Plasti-Corder to achieve the anti-electrostatic property. The mechanical and rheological properties of the PP composite obtained were investigated with a tensile tester and the rheometer (Paar Physica, MC100) respectively. It was found that these properties deteriorate because of the poor adhesion in the interface between the polymer matrix and the filler. But, the surface electric resistivity can be decreased from above 10/sup 13/.OMEGA./sq down to 10/sup 11/.OMEGA./sq in case of the pp composite with 10wt% nickel powder.