

Plastic objects for metal-plating with improved shaping properties

Abstract

- 5 The invention relates to metalizable foils or sheets produced from a plastics mixture comprising, based on the total weight of components A, B, C, and D, which gives a total of 100% by weight,
- a from 5 to 50% by weight of a thermoplastic polymer as component A,
 - 10 b from 50 to 95% by weight of a metal powder with an average particle diameter of from 0.01 to 100 μm (determined by the method defined in the description), where the normal electrode potential of the metal in acidic solution is more negative than that of silver, as component B,
 - c from 0 to 10% by weight of a dispersing agent as component C, and
 - 15 d from 0 to 40% by weight of fibrous or particulate fillers or their mixtures as component D,

wherein the tensile strain at break of component A (determined by the method defined in the description) is greater by a factor of from 1.1 to 100 than the tensile strain at
20 break of the plastics mixture comprising components A, B, and, if present, C and D (determined by the method defined in the description), and wherein the tensile strength of component A (determined by the method defined in the description) is greater by a factor of from 0.5 to 4 than the tensile strength of the plastics mixture comprising components A, B, and, if present, C and D (determined by the method defined in the
25 description).

The invention further relates to thermoplastic molding compositions for production of these metalizable foils or sheets, to a pelletized material comprising these thermoplastic molding compositions, to composite layered foils or composite layered
30 sheets, and to moldings comprising these foils or sheets, to metalized polymer products comprising these foils or sheets, or composite layered foils or composite layered sheets, and moldings, to processes for production of these articles, to the use of these articles, and also to EMI shielding systems, such as absorbers, attenuators, or reflectors for electromagnetic radiation, oxygen scavengers, electrically conducting
35 components, gas barriers, and decorative parts comprising these articles.