

ABSTRACT OF THE DISCLOSURE

TITLE OF INVENTION:- EXTRUDED PROPYLENE POLYMER RESIN FOAM

Disclosed is an extruded propylene polymer resin foam comprising a propylene polymer resin exhibiting a biaxial extensional viscosity of at least 3.0×10^6 poises at a biaxial extensional strain of 0.2, and a biaxial strain hardening rate α of at least 0.25, the biaxial strain hardening rate α being defined by the following formula:

$$\alpha = 0.77 \times (\log \eta_2 - \log \eta_1)$$

wherein η_1 represents the biaxial extensional viscosity at a biaxial extensional strain of 0.01, and η_2 represents the biaxial extensional viscosity at a biaxial extensional strain of 0.2,

said foam containing a vast plurality of cells, and having a thickness of at least 20 mm, a density of from 0.005 to 0.03 g/cm³, an average cell diameter of from 0.4 to 2.0 mm, and a closed cell ratio of at least 80 %. The resin foam of the present invention has not only light weight, but also exhibits high cushioning performance and excellent mechanical strengths, so that, after fabricated into various sizes by cutting, the resultant resin foam articles can be advantageously used in the fields of cushion packaging materials, floating materials, and heat insulating materials. Figure 1 of the drawings should accompany the abstract when published.