POLYMER POLYOL AND FLAME RETARDANT POLYURETHANE RESIN AND FOAM PREPARED THEREFROM

Abstract of the Disclosure

This invention relates to a polymer dispersed polyol having a vinyl polymer dispersed in polyol, the vinyl polymer comprising containing 5 to 80 wt% of acrylamide compound (A) represented by the formula (1):

$CH_2=CR^1CONR^2R^3$ (1)

wherein R^1, R^2 and R^3 are a hydrogen atom or hydrocarbon group having 1 to 10 carbon atoms, 0 to 70 wt% of one or more monomer (B) selected from acrylonitrile and methacrylonitrile, and 0 to 95 wt% of a vinyl monomer (C) which can copolymerize with (A) and (B), and 95 to 20 wt% of the total amount of (B) and (C); and when (C) is 0 wt%, (A) is the polymer of a vinyl monomer mixture containing an acrylamide derivative represented by the formula (2):

$CH_2=CR^4CONR^5R^6$ (2)

wherein R^4, R^5 and R^6 are a hydrogen atom or hydrocarbon group having 1 to 10 carbon atoms, and not simultaneously the hydrogen atom; and said polyol comprising containing 5 to 50 wt% of the vinyl polymer, and flame retardant polyurethane resin and flame retardant polyurethane foam which are prepared from the same.