

Abstract

Disclosed are an ethylene copolymer and a method for preparing same, and a composition, crosslinked polymer, and tire containing said ethylene copolymer; the ethylene copolymer contains an ethylene structural unit derived from ethylene and a conjugated diene structural unit derived from a conjugated diene; taking the total amount of said ethylene copolymer as the reference, the content of said conjugated diene structural unit is 25-45 mol%; the conjugated diene is formed by 1,2-polymerization and the content of 1,2-polymeric vinyl structural units having side chain double bonds is 20-40 mol%; taking the total number of conjugated diene structural units in the ethylene copolymer as the reference, the total amount of said 1,2-polymeric structural units is 95 mol% or more, and the ethylene copolymer has a weight average molecular weight of 20,000 to 300,000. The ethylene copolymer of the present invention has good crosslinking properties.