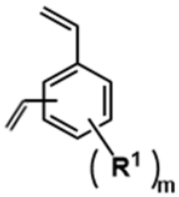
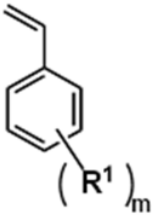
Abstract

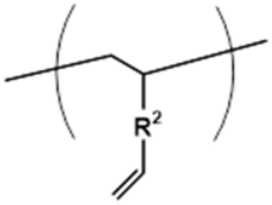
Provided is a novel polyfunctional vinyl aromatic copolymer having a syndiotactic structure that can provide a cured product or molded article having improved dielectric properties, solubility, processability, compatibility, heat resistance, moist heat reliability, and heat resistance. The polyfunctional vinyl aromatic copolymer contains 2 mol% or more and less than 95 mol% of a repeating unit (a) derived from a divinyl aromatic compound (A) represented by the following general formula (1), and 5 mol% or more and less than 98 mol% of a repeating unit (b) derived from a monovinyl aromatic compound (B) represented by the following general formula (2), characterized in that a C^1 carbon of a phenyl group constituting (A) and (B) has a tacticity of 30% or more in a racemic pentad determined by ^{13}C-NMR, the polyfunctional vinyl aromatic copolymer contains 2 mol% or more and less than 95 mol% of an unsaturated hydrocarbon group represented by the following formula (a1) with respect to the total of (a) and (b), and the polyfunctional vinyl aromatic copolymer has a number average molecular weight (Mn) of from 500 to 30,000, a molecular weight distribution (Mw/Mn) expressed as the ratio of weight average molecular weight to number average molecular weight of 20.0 or less, and is soluble in a solvent.



(1)



(2)



(a1)