

Modified Conjugated Diene-Based Polymer, Production
Method Therefor, Polymer Composition,
Crosslinked Polymer, and Tire

ABSTRACT

A modified conjugated diene-based polymer includes, at one terminal of a conjugated diene-based polymer chain, a polymer block having a structure derived from at least one compound selected from the group consisting of the following vinylsilane compound (A) and aromatic vinyl compound (B):

(A) a vinylsilane compound having a group $-\text{SiR}^1\text{R}^2\text{R}^3$

(B) an aromatic vinyl compound containing at least one atom selected from the group consisting of a nitrogen atom, a phosphorus atom, and a sulfur atom, wherein active hydrogen is not bonded to the nitrogen atom, the phosphorus atom, or the sulfur atom.