the dynamic viscoelasticity measurement (1 Hz) of the hydrogenated block copolymer is in the range of higher than -45°C and 10°C or lower, the height of the tan δ peak is 1.2 or more, and the width at half height of the tan δ peak is 18°C or lower.

[Claim 9]

The hydrogenated block copolymer according to any one of claims 1 to 8, wherein a total content of a component having a weight average molecular weight twice or more a peak weight average molecular weight and a component having a weight average molecular weight 0.5 times or less the peak weight average molecular weight is 15% or less.

[Claim 10]

A polypropylene resin composition comprising 10 to 90 % by mass of the hydrogenated block copolymer according to any one of claims 1 to 9 and 10 to 90 % by mass of a polypropylene resin, wherein

in a wide angle X ray diffractometry of the polypropylene resin composition, an intensity ratio of diffraction peak intensity (I14) at a scattering angle (2θ) of 14° to diffraction peak intensity (I15) at a scattering angle (2θ) of 15°, I14/I15, is 0.1 or more and less than 1.4.

[Claim 11]

The polypropylene resin composition according to claim 10, wherein in measurement by cross fractionation chromatography, an integral elution volume at -20°C or lower is 0.1% or more and less than 50% of a total volume, an integral elution volume in a range of higher than -20°C and lower than 60°C is 10% or more and less than 90% of the total volume, and an integral elution volume in a range of 60°C or higher and 150°C or lower is 10% or more and less than 90% of the total volume.

[Claim 12]

The polypropylene resin composition according to claim 10 or 11, wherein in measurement by cross fractionation chromatography, a molecular weight distribution (Mw/Mn) of an eluted component in a range of 10°C or higher and lower than 60°C is 1.05 or more and 1.50 or less.

[Claim 13]

A tube comprising the polypropylene resin composition according to any one of claims 10 to 12.

[Claim 14]

A sheet-shaped molding comprising the polypropylene resin composition according to any one of claims 10 to 12.

[Claim 15]

A tacky film comprising:

a substrate film; and

a tacky layer comprising the hydrogenated block copolymer according to any one of claims 1 to 9, the tacky layer being disposed on the substrate film.

[Claim 16]

The tacky film according to claim 15, wherein the tacky layer further comprises 0.5 to 50 % by mass of a tackifier.

[Claim 17]

A method for producing the hydrogenated block copolymer according to any one of claims 1 to 9, comprising

a polymerization step of polymerizing a vinyl aromatic compound and a conjugated diene compound in a presence of a vinylating agent, an organolithium compound, and an alkali metal alkoxide under conditions where a molar ratio of the vinylating agent to the organolithium compound (vinylating agent/organolithium compound) is 0.2 or more and less than 3.0, and a molar ratio of the alkali metal alkoxide to the organolithium compound (alkali metal alkoxide/organolithium compound) is 0.01 or more and 0.3 or less.

[Claim 18]

The method for producing the hydrogenated block copolymer according to claim 17, wherein

in the polymerization step, difference in polymerization temperature in forming the polymer block (B) is within 20°C, and

wherein a value obtained from $V_H - V_L$ is 10 mol% or less,

wherein, when the polymer block (B) is divided into a first region to a sixth region in order from a polymerization start side, each region having an equal mass, V_H and V_L represent a highest value and a lowest value, respectively, of vinyl bond contents before hydrogenation of the first region to the sixth region.