Claims

[Claim 1]

A double-sided adhesive sheet comprising a pressure-sensitive adhesive layer formed by curing a pressure-sensitive adhesive composition comprising a (meth)acrylic copolymer (A),

wherein

a tensile modulus of elasticity at 25°C (E') is from 1.0 to 20 MPa, as calculated as a slope in a section of strain of from 10 to 200% in a stress-strain curve obtained by a tensile test performed at a tensile speed of 300 mm/min and a grip distance of 20 mm for a test piece of 20 mm × 70 mm, and

a modulus of elasticity ratio (E'/G') of the tensile modulus of elasticity at 25°C (E') to a shear storage modulus of elasticity at 25°C (G') as obtained by dynamic viscoelasticity measurement in a shear mode at a frequency of 1 Hz is from 15 to 100.

[Claim 2]

The double-sided adhesive sheet according to claim 1, wherein a stress relaxation rate (X) as calculated by Equation (I) is 0.50 or less, where an initial modulus of elasticity (G'(0)) is a value of a modulus of elasticity after 0.1 seconds have elapsed from application of a strain of 25% to the pressure-sensitive adhesive layer at 70°C and a relaxation modulus of elasticity (G'(300)) is a value of a modulus of elasticity after 300 seconds have elapsed from application of a strain of 25% to the pressure-sensitive adhesive layer at 70°C,

Stress relaxation rate (X) = (G'(300)/G'(0)) ··· (I).

[Claim 3]

The double-sided adhesive sheet according to claim 1 or 2, wherein the pressure-sensitive adhesive composition includes a crosslinking agent (B) and a photoinitiator (C).

[Claim 4]

The double-sided adhesive sheet according to any one of claims 1 to 3, wherein the pressure-sensitive adhesive composition includes an ultraviolet absorber (D).

[Claim 5]

The double-sided adhesive sheet according to any one of claims 1 to 4, wherein the double-sided adhesive sheet has a gel fraction of from 30 to 90%.

[Claim 6]

The double-sided adhesive sheet according to any one of claims 1 to 5, wherein a glass transition temperature (Tg) defined by a maximum value of Tanδ as obtained by dynamic viscoelasticity measurement in a shear mode at a frequency of 1 Hz is -10°C or lower.

[Claim 7]

The double-sided adhesive sheet according to any one of claims 1 to 6, wherein the (meth)acrylic copolymer (A) contains a constituent unit derived from at least one selected from the group consisting of a hydroxy group-containing monomer (a2) and a nitrogen-containing monomer (a3).

[Claim 8]

The double-sided adhesive sheet according to claim 3, wherein the photoinitiator (C) is a hydrogen abstraction type photoinitiator.

[Claim 9]

The double-sided adhesive sheet according to any one of claims 1 to 8, wherein the double-sided adhesive sheet comprises a laminate pressure-sensitive adhesive layer in which two or more pressure-sensitive adhesive layers having different shear storage moduli of elasticity at 25°C (G') are laminated adjacent to each other.

[Claim 10]

The double-sided adhesive sheet according to claim 9, wherein the laminate pressure-sensitive adhesive layer includes a first pressure-sensitive adhesive layer having a lower shear storage modulus of elasticity at 25°C (G') than that of an adjacent pressure-sensitive adhesive layer, and a second pressure-sensitive adhesive layer having a greater shear storage modulus of elasticity at 25°C (G') than that of an adjacent pressure-sensitive adhesive layer.

[Claim 11]

The double-sided adhesive sheet according to claim 10, wherein the laminate pressure-sensitive adhesive layer has a three-layer configuration in which the first pressure-sensitive adhesive layer, the second pressure-sensitive adhesive layer, and the first pressure-sensitive adhesive layer are laminated in this order.

[Claim 12]

The double-sided adhesive sheet according to claim 10 or 11, wherein a pressure-sensitive adhesive composition forming the second pressure-sensitive adhesive layer includes an ultraviolet absorber (D).

[Claim 13]

The double-sided adhesive sheet according to any one of claims 10 to 12, wherein a content of a crosslinking agent (B) contained in a pressure-sensitive adhesive composition forming the second pressure-sensitive adhesive layer is larger than a content of a crosslinking agent (B) contained in a pressure-sensitive adhesive composition forming the first pressure-sensitive adhesive layer.

[Claim 14]

The double-sided adhesive sheet according to any one of claims 10 to 13, wherein a ratio (t2/t1) of a thickness (t2) of the second pressure-sensitive adhesive layer to a thickness (t1) of the first pressure-sensitive adhesive layer is 0.2 or more.

[Claim 15]

A double-sided adhesive sheet with a release film comprising:

the double-sided adhesive sheet according to any one of claims 1 to 14; and

a release film laminated on the double-sided adhesive sheet.

[Claim 16]

A laminate for an image display device, the laminate comprising:

two image display device constituent members; and

the double-sided adhesive sheet according to any one of claims 1 to 14 interposed between the two image display device constituent members.

[Claim 17]

An image display device comprising the laminate for an image display device according to claim 16.