CLAIMS

1. A photocurable pressure sensitive adhesive sheet in which a pressure sensitive adhesive composition containing an acryl-based base polymer, an acryl-based oligomer and a photocurable compound is formed in a layer shape,

wherein the acryl-based base polymer includes an acryl-based polymer chain crosslinked with a urethane-based segment having an average molecular weight of 4000 to 50000, and a content of the urethane-based segment is 3 to 30 parts by weight based on 100 parts by weight of the acryl-based polymer chain

wherein the acryl-based oligomer has a weight average molecular weight of 1000 to 30000 and a glass transition temperature of 20°C or higher, and a content of the acryl-based oligomer is 0.5 to 20 parts by weight based on 100 parts by weight of the acryl-based base polymer,

wherein the pressure sensitive adhesive composition is a semi-cured composition having a polymerization ratio of 90 to 98%,

wherein

the pressure sensitive adhesive sheet having a haze of 1% or less,

the pressure sensitive adhesive sheet having an adhesive strength of 1.5 N/10 mm or more to glass, and

the pressure sensitive adhesive sheet having a shear storage elastic modulus of 0.15 MPa or less at a temperature of 25°C,

wherein when the pressure sensitive adhesive composition is fully-cured to have a polymerization ratio of 99%, the obtained fully-cured pressure sensitive adhesive sheet has a glass transition temperature of -3°C or lower, and a shear storage elastic modulus of 0.16 MPa or more at 25°C.

2. The pressure sensitive adhesive sheet according to claim 1, having a glass transition temperature of -5°C or lower.

3. The pressure sensitive adhesive sheet according to claim 1 or 2, having a loss tangent peak-top value of 1.6 or more.

4. The pressure sensitive adhesive sheet according to any one of claims 1 to 3,

wherein when the pressure sensitive adhesive composition is fully-cured to have a polymerization ratio of 99%, the obtained fully-cured pressure sensitive adhesive sheet has a loss tangent peak-top value of 1.5 or more.

5. The pressure sensitive adhesive sheet according to any one of claims 1 to 4, wherein in the acryl-based base polymer, a monomer component for forming the acryl-based polymer chain and a urethane di(meth)acrylate having a (meth)acryloyl group at both terminals are copolymerized to introduce a crosslinked structure into the acryl-based polymer chain by the urethane-based segment.

6. A method for manufacturing an image display device in which a transparent member having a level difference portion disposed on a viewing-side surface,

the method comprising

bonding the pressure sensitive adhesive sheet according to any one of claims 1 to 5 to the transparent member; and

thereafter irradiating the pressure sensitive adhesive sheet with an active ray to photocure the pressure sensitive adhesive sheet.

7. A method for manufacturing the pressure sensitive adhesive sheet according to any one of claims 1 to 5,

the method comprising:

applying a composition containing an acryl-based monomer and/or a partially polymerized product thereof, an acryl-based oligomer having a weight average molecular weight of 1000 to 30000 and a glass transition temperature of 20°C or higher, and a urethane di(meth)acrylate having an weight average molecular weight of 4000 to 50000, onto a substrate in a layer shape; and

thereafter irradiating the composition with an active ray to photocure the composition such that the composition is semi-cured to have a polymerization ratio of 90 to 98%,

wherein the composition contains 3 to 30 parts by weight of the urethane di(meth)acrylate based on 100 parts by weight of the total of the acryl-based monomer and partially polymerized product thereof.

8. The method according to claim 7, wherein a glass transition temperature of the urethane di(meth)acrylate is 0°C or lower.