Claims

1. A photocurable pressure sensitive adhesive sheet comprising a pressure sensitive adhesive composition deposited in a layer-form, wherein

the pressure sensitive adhesive composition contains a base polymer having a crosslinked structure, a photopolymerizable polyfunctional compound having two or more photopolymerizable functional groups per molecule, a photopolymerization initiator, and an ultraviolet absorber,

the pressure sensitive adhesive sheet having a light transmittance of 85% or more at a wavelength of 420 nm, a light transmittance of 80% or more at a wavelength of 405 nm, a light transmittance of 4 to 25% at a wavelength of 380 nm, and a value εw of 10 to 100,

wherein

w is a weight parts content of the photopolymerization initiator based on 100 parts by weight of the base polymer, ε is a light absorption coefficient of the photopolymerization initiator at a wavelength of 380 nm, wherein unit of ε is $mLg^{-1}cm^{-1}$, and the εw is product of w and ε.

2. The pressure sensitive adhesive sheet according to claim 1, having a light transmittance of 1% or less at a wavelength of 365 nm.

3. The pressure sensitive adhesive sheet according to claim 1 or 2, wherein the photopolymerization initiator has a light absorption coefficient of 50 [$mLg^{-1}cm^{-1}$] or less at a wavelength of 405 nm and a light absorption coefficient of 80 [$mLg^{-1}cm^{-1}$] or more at a wavelength of 380 nm.

4. The pressure sensitive adhesive sheet according to any one of claims 1 to 3, wherein the photopolymerization initiator has an absorption maximum in the wavelength range of 310 nm to 370 nm.

5. The pressure sensitive adhesive sheet according to any one of claims 1 to 4, wherein a content of the photopolymerization initiator is 0.05 to 1 part by weight

based on 100 parts by weight of the base polymer.

6. The pressure sensitive adhesive sheet according to any one of claims 1 to 5, wherein a value of εwT is 100 to 1200,
wherein

T is a percent light transmittance of the pressure sensitive adhesive sheet at a wavelength of 380 nm,

w is a weight parts content of the photopolymerization initiator based on 100 parts by weight of the base polymer,

ε is a light absorption coefficient of the photopolymerization initiator at a wavelength of 380 nm, wherein unit of ε is $mLg^{-1}cm^{-1}$, and

the εwT is product of T, w and ε.

7. The pressure sensitive adhesive sheet according to any one of claims 1 to 6, wherein the ultraviolet absorber is at least one selected from triazine-based compounds and benzotriazole-based compounds.

8. The pressure sensitive adhesive sheet according to any one of claims 1 to 7, wherein the base polymer includes an acryl-based polymer.

9. The pressure sensitive adhesive sheet according to any one of claims 1 to 8, wherein the base polymer includes a hydroxy group-containing component as a monomer unit, and an isocyanate crosslinker is bonded to the hydroxy group of the hydroxy group-containing component.

10. The pressure sensitive adhesive sheet according to any one of claims 1 to 9, wherein the photopolymerizable polyfunctional compound is a polyfunctional (meth)acrylate.

11. The pressure sensitive adhesive sheet according to any one of claims 1 to 10, wherein a content of the photopolymerizable polyfunctional compound is 0.3 to 10 parts by weight based on 100 parts by weight of the base polymer.

12. The pressure sensitive adhesive sheet according to any one of claims 1 to 11, wherein a gel fraction is 30 to 80%.

13. The pressure sensitive adhesive sheet according to any one of claims 1 to 12, wherein a gel fraction of the pressure sensitive adhesive sheet after the pressure sensitive adhesive sheet is photocured by application of an ultraviolet ray at 1000 mJ/cm^2 is higher by 5% or more than a gel fraction before the photocuring.

14. A pressure sensitive adhesive-equipped optical film, comprising:

an optical film;

a first pressure sensitive adhesive sheet stacked on a first principal surface of the optical film;

and a second pressure sensitive adhesive sheet stacked on a second principal surface of the optical film, wherein

the first pressure sensitive adhesive sheet is the pressure sensitive adhesive sheet according to any one of claims 1 to 13.

15. A method for manufacturing an image display device including a transparent member having a level difference portion arranged on a viewing-side surface,

the method comprising

bonding the pressure sensitive adhesive sheet according to any one of claims 1 to 13 and the transparent member, and then

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