CLAIMS

1. An adhesive, comprising:

a (meth)acrylate ester polymer;

a urethane acrylate oligomer having 4 or more vinyl groups; and

silicone microparticles.

2. The adhesive according to Claim 1, wherein a content of the silicone microparticles is between 0.05 parts by mass and 150 parts by mass per 100 parts by mass of the (meth)acrylate ester polymer.

3. The adhesive according to Claim 1, wherein a content of the urethane acrylate oligomer is between 15 parts by mass and 225 parts by mass per 100 parts by mass of the (meth)acrylate ester polymer.

4. The adhesive according to Claim 1, wherein a content of the silicone microparticles is between 0.1 parts by mass and 100 parts by mass per 100 parts by mass of the (meth)acrylate ester polymer; and a content of the urethane acrylate oligomer is between 20 parts by mass and 200 parts by mass.

5. The adhesive according to Claim 1, wherein the silicone microparticles are microparticles having silicone rubber spherical microparticles coated with a polyorganosilsesquioxane resin.

6. The adhesive according to Claim 1, further comprising a silicone graft polymer.

7. The adhesive according to Claim 6, wherein a content of the silicone graft polymer is between 0.05 parts by mass and 12.5 parts by mass per 100 parts by mass of the (meth)acrylate ester polymer.

8. An adhesive sheet, comprising:

a substrate film; and

an adhesive layer having the adhesive according to Claim 1 coated on the substrate film.

9. The adhesive sheet according to Claim 8, wherein the sheet is used for fixing an electronic component.

10. The adhesive sheet according to Claim 8, wherein a die attachment film is laminated on the adhesive layer.

11. A process for producing electronic components, the process comprising:

a wafer-pasting step of pasting a wafer on a surface of a die attachment film of the adhesive sheet according to Claim 10;

a dicing step of dicing the wafer pasted on the adhesive sheet into die chips; and

a pick-up step of peeling the die attachment film from the adhesive layer after the dicing step, and picking up the die chip together with the die attachment film.

12. A process for producing electronic components, the process comprising:

a coating step of coating a whole backside of a wafer with a paste bond;

a semi-curing step of heating the paste bond and causing the bond to be semi-cured like a sheet to form a bond semi-cured layer;

an adhesive-sheet-pasting step of pasting the bond semi-cured layer on an adhesive layer of the adhesive sheet according to Claim 8;

a dicing step of dicing the wafer into die chips after the adhesive-sheet-pasting step; and

a pick-up step of peeling the bond semi-cured layer from the adhesive layer after the dicing step, and picking up the die chip together with the bond semi-cured layer.

CLAIMS

1. An adhesive sheet, comprising:

a substrate film;

an adhesive layer having an adhesive coated on the substrate film; and

a die attachment film laminated on the adhesive layer, the adhesive further comprising:

a (meth)acrylate ester polymer;

a urethane acrylate oligomer having 4 or more vinyl groups;

silicone microparticles; and

a silicone graft polymer, wherein:

the content of the silicone microparticles is between 0.1 parts by mass and 100 parts by mass per 100 parts by mass of the (meth)acrylate ester polymer,

the content of the urethane acrylate oligomer is between 20 parts by mass and 200 parts by mass,

the content of the silicone graft polymer is between 0.05 parts by mass and 12.5 parts by mass per 100 parts by mass of the (meth)acrylate ester polymer, and

the silicone microparticles are microparticles having silicone rubber spherical microparticles coated with a polyorganosilsesguioxane resin.

2. The adhesive sheet according to claim 1, wherein the sheet is used for fixing an electronic component.

3. A process for producing electronic components, the process comprising:

a wafer-pasting step of pasting a wafer on a surface of a die attachment film of the adhesive sheet according to claim 1;

a dicing step of dicing the wafer pasted on the adhesive sheet into die chips; and

a pick-up step of peeling the die attachment film from the adhesive layer after the dicing step, and picking up the die chip together with the die attachment film.