In one aspect, there is~~The present invention~~ provided a method for manufacturing an electronic component, comprising a semi-cured adhesive layer-forming step of forming a semi-cured adhesive layer by coating a pasty adhesive on the rear face of a wafer and curing the pasty adhesive partially by UV irradiation or heating into the sheet shape;

a fixing step of fixing the semi-cured adhesive layer of the wafer on a ring frame by bonding them to a cohesive sheet;

a dicing step of dicing the wafer into semiconductor chips with a dicing blade; a UV-irradiating step of irradiating ultraviolet ray; and

a pick-up step of picking up the chips and semi-cured adhesive layers from the cohesive layer, wherein:

the cohesive sheet has a base film and a cohesive layer formed on one face of the base film;

the cohesive constituting the cohesive layer contains 100 parts by mass of a (meth)acrylate ester copolymer (A), 5 to 200 parts by mass of a ultraviolet polymerizable compound (B), 0.5 to 20 parts by mass of a multifunctional isocyanate curing agent (C), 0.1 to 20 parts by mass of a photopolymerization initiator (D) and 0.1 to 20 parts by mass of a silicone polymer (E);

the (meth)acrylate ester copolymer (A) is a copolymer of (meth)acrylate ester monomers or a copolymer of a (meth)acrylate ester monomer and a vinyl compound monomer, wherein neither the (meth)acrylate ester monomer nor the vinyl compound monomer contains any hydroxyl group;

The ultraviolet polymerizable compound (B) contains a urethane acrylate oligomer (B1) and a multifunctional (meth)acrylate (B2);

the urethane acrylate oligomer (B1) has a weight-average molecular weight of 50000 or more, a polydiversity Mw/Mn, ratio of weight-average molecular weight Mw to

number-average molecular weight Mn, of 5 or more, and a vinyl group number of 10 or more;

the photopolymerization initiator (D) has one or more hydroxyl groups; and

the silicone polymer (E) has hydroxyl groups.

[0008a]

In another aspect, there is provided a cohesive sheet for production of an electronic component, which is used as bonded to a semi-cured adhesive layer formed on the rear face of a wafer, comprising a base film and a cohesive layer formed on one face of the base film, wherein:

the cohesive constituting the cohesive layer contains 100 parts by mass of a (meth)acrylate ester copolymer (A), 5 to 200 parts by mass of a ultraviolet polymerizable compound (B), 0.5 to 20 parts by mass of a multifunctional isocyanate curing agent (C), 0.1 to 20 parts by mass of a photopolymerization initiator (D), and 0.1 to 20 parts by mass of a silicone polymer (E);

the (meth)acrylate ester copolymer (A) is a copolymer of (meth)acrylate ester monomers or a copolymer of a (meth)acrylate ester monomer and a vinyl compound monomer, wherein neither the (meth)acrylate ester monomer nor the vinyl compound monomer contains any hydroxyl group;

the ultraviolet polymerizable compound (B) contains a urethane acrylate oligomer (B1) and multifunctional (meth)acrylates (B2);

the urethane acrylate oligomer (B1) has a weight-average molecular weight of 50000 or more, a polydiversity Mw/Mn, ratio of weight-average molecular weight Mw to number-average molecular weight Mn, of 5 or more, and a vinyl group number of 10 or more;

the photopolymerization initiator (D) has one or more hydroxyl groups; and

the silicone polymer (E) has hydroxyl groups.

[0009]

It is possible in such a configuration of the method for manufacturing an electronic component to improve semiconductor chip-holding efficiency, pickup efficiency, and contamination resistance in a well-balanced manner.

[0010]

Preferably in the present invention, the urethane acrylate oligomer (B1) is prepared in reaction of trimeric isophorone diisocyanate with hydroxyl group-containing acrylates containing dipentaerythritol pentaacrylate as the major component and the multifunctional (meth)acrylate (B2) is dipentaerythritol hexaacrylate. It is thus possible to obtain an advantageous effect that it is possible to reduce the adhesiveness between the cohesive sheet and the semi-cured adhesive layer after ultraviolet irradiation and carry out the step of picking up chips and semi-cured adhesive layers from the cohesive layer more reliably.

[0011]

Preferably in the present invention, the composition for the semi-cured adhesive layer contains at least one or both of an epoxy resin and a (meth)acrylate ester. It is thus possible to obtain an advantageous effect that it is possible to reduce the adhesiveness between the cohesive sheet and the semi-cured adhesive layer after ultraviolet irradiation and carry out the step of picking up chips and semi-cured adhesive layers from the cohesive layer more reliably.