**Claims**

1. An adhesive sheet for laser dicing, comprising a substrate film having a back layer containing a friction reducing agent and an antistatic agent on one surface and having an adhesive layer on another surface, wherein

the back layer has a surface with arithmetic mean roughness Ra of 0.1 μm or less,

the adhesive sheet has a tensile modulus of elasticity at 23° C. from 50 to 180 MPa,

the adhesive sheet has a parallel transmittance of 85% or more in a wavelength range from 400 to 1400 nm, and

a coefficient of kinetic friction of the back layer of the adhesive sheet at 23° C. is greater than or equal to 0.12 and less than or equal to 0.30.

2. The sheet of claim 1, wherein the friction reducing agent is a silicone-based graft copolymer.

3. The sheet of claim 1, wherein the antistatic agent is a quaternary amine salt monomer.

4. The sheet of claim 1, wherein the back layer contains 100 parts by mass of an organic binder, from 0.005 to 10 parts by mass of the antistatic agent, and from 0.005 to 10 parts by mass of the friction reducing agent.

5. The sheet of claim 4, wherein the organic binder is a (meth)acrylate copolymer.

6. A method of manufacturing a semiconductor device, comprising:

bonding the adhesive sheet of claim 1 to a back surface or a front surface of a semiconductor wafer having a circuit formed on the front surface;

positioning the wafer by irradiating the wafer with laser light at a wavelength in a visible region through the adhesive sheet;

forming a modified portion inside the wafer by irradiating the wafer with laser light at a wavelength in an infrared region through the adhesive sheet; and

producing a chip by expanding the adhesive sheet, thereby dividing the wafer.