CLAIMS

1. An adhesive tape for semiconductor wafer processing, comprising a base material layer and an adhesive layer formed on at least one side of the base material layer, wherein

the adhesive layer contains a carboxyl group-containing polymer, a radiation-polymerizable compound and a crosslinking agent,

the weight average molecular weight of the radiation-polymerizable compound is 500 or more and 14000 or less, the number of functional groups of the radiation-polymerizable compound is 5 or more, and

the content of the crosslinking agent is 3 parts by weight to 14 parts by weight based on 100 parts by weight of the carboxyl group-containing polymer.

2. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the weight average molecular weight of the radiation-polymerizable compound is 1000 or more and 14000 or less, and the number of functional groups is 10 or more.

3. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the carboxyl group-containing polymer further contains ester group, and

the ratio of the number of ester groups to the number of carboxyl groups in the carboxyl group-containing polymer (ester

groups/carboxyl groups) is 80/20 to 95/5.

4. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the weight average molecular weight of the radiation-polymerizable compound is 500 to 3000 and the number of functional groups is 15 or less.

5. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the functional groups are vinyl groups.

6. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the content of the radiation-polymerizable compound is 30 parts by weight to 70 parts by weight based on 100 parts by weight of the carboxyl group-containing polymer.

7. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the radiation-polymerizable compound is urethane acrylate.

8. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the crosslinking agent contains an isocyanate group.

9. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the carboxyl group-containing polymer is a copolymer of an acrylic acid ester and acrylic acid.

CLAIMS

1. An adhesive tape for semiconductor wafer processing, comprising a base layer and an adhesive layer which is formed on the base layer and comprises mainly a carboxyl group-containing polymer, wherein

the adhesive layer further comprises an urethane acrylate and a crosslinking agent,

the urethane acrylate has the weight average molecular weight of 8000 or more and 20000 or less and the number of functional groups of 10 or more, and

the crosslinking agent is 4 to 14 parts by weight based on 100 parts by weight of the carboxyl group-containing polymer.

2. The adhesive tape for semiconductor wafer processing according to claim 1, wherein the carboxyl group-containing polymer further contains ester group, and

the ratio of the number of ester groups to the number of carboxyl groups in the carboxyl group-containing polymer (ester groups/carboxyl groups) is 80/20 to 95/5.