The inventors of the present disclosure have found that a release film having a specific configuration has excellent mold release properties, for example, mold release properties from a sealing resin used in flip chip connection, and has low contamination properties. The inventors of the present disclosure have further found that the release film can be used in molding multiple times.

[0011]

In an example, the present disclosure provides a release film having a base layer formed of a thermoplastic resin and a surface layer formed of a resin composition laminated on at least one surface of the base layer, wherein the trouser tear strength in accordance with JIS K7128-1 is 5 N/mm or more, the peeling force of the resin composition is 15 mN/30 mm or less when measured at 175ºC according to JIS Z0237, and the breaking point elongation of the resin composition is 70% or more when measured at 175ºC according to JIS K7127.

In an aspect, there is provided a release film having a base layer formed of a thermoplastic resin and a surface layer formed of a resin composition laminated on at least one surface of the base layer, wherein the trouser tear strength in accordance with JIS K7128-1 is 5 N/mm or more, the peeling force of the resin composition is 15 mN/30 mm or less when measured at 175ºC according to JIS Z0237, and the breaking point elongation of the resin composition is 70% or more when measured at 175ºC according to JIS K7127, wherein

the resin composition contains isocyanurate-type polyisocyanate and adduct-type polyisocyanate and a tetrafluoroethylene resin, wherein an amount of the isocyanurate-type polyisocyanate is 8.6 parts by mass to 12.9 parts by mass with respect to 100 parts by mass of the tetrafluoroethylene resin, and wherein an amount of the adduct-type polyisocyanate is 2.6 parts by mass to 10.4 parts by mass with respect to 100 parts by

mass of the tetrafluoroethylene resin.

The resin composition may be a fluororesin.

The resin composition may contain an isocyanate curing agent.

The resin composition may contain a tetrafluoroethylene resin.

The release film may be used in sealing of a semiconductor to be flip-chip connected.

The release film may be used for molding two or more times.

Advantageous Effects

[0012]

The present disclosure provides a release film having excellent release properties and low contamination. Further, the release film of the present disclosure can be used repeatedly for multiple moldings.

CLAIMS

[Claim 1]

A release film having a base layer formed of a thermoplastic resin and a surface layer formed of a resin composition laminated on at least one surface of the base layer, wherein the trouser tear strength in accordance with JIS K7128-1 is 5 N/mm or more, the peeling force of the resin composition is 15 mN/30 mm or less when measured at 175ºC according to JIS Z0237, and the breaking point elongation of the resin composition is 70% or more when measured at 175ºC according to JIS K7127, wherein the resin composition contains isocyanurate-type polyisocyanate and adduct-type polyisocyanate and a tetrafluoroethylene resin, wherein an amount of the isocyanurate-type polyisocyanate is 8.6 parts by mass to 12.9 parts by mass with respect to 100 parts by mass of the tetrafluoroethylene resin, and wherein an amount of the adduct-type polyisocyanate is 2.6 parts by mass to 10.4 parts by mass with respect to 100 parts by mass of the tetrafluoroethylene resin.

[Claim 2]

The release film according to claim 1, adapted for use in sealing of a semiconductor to be flip-chip connected.

[Claim 3]

The release film according to claim 1, adapted for molding two or more times.