Claims

[Claim 1]

Use of a methacrylic resin composition in non-contact hot plate welding, the methacrylic resin composition comprising a methacrylic resin comprising 80 to 99.9% by mass of a methacrylic acid ester monomer unit and 0.1 to 20% by mass of a unit of at least one additional vinyl monomer copolymerizable with the methacrylic acid ester monomer, wherein

the methacrylic resin composition has a melt flow rate (MFR) of 2.5 g/10 min or lower at 230°C at a load of 3.8 kg.

[Claim 2]

The use of methacrylic resin composition in non-contact hot plate welding according to claim 1, wherein the methacrylic resin is a methacrylic resin which

has a weight-average molecular weight of 300000 or lower as measured by gel permeation chromatography (GPC), and

contains 6 to 50% of a component having a molecular weight that is 5 times or more lower than a peak top molecular weight (Mp) obtained from a GPC elution curve.

[Claim 3]

The use of methacrylic resin composition in non-contact hot plate welding according to claim 1 or 2, wherein the methacrylic resin is a methacrylic resin in which

an abundance of a component having a molecular weight of 250000 or higher obtained from the GPC elution curve is 12% or more of a GPC area.

[Claim 4]

The use of methacrylic resin composition in non-contact hot plate welding according to any one of claims 1 to 3, wherein the methacrylic resin

has an extrapolated onset temperature (°C) of 120°C or lower as determined from a glass transition curve obtained by heating from 40°C to 210°C at a heating rate of 10°C/min according to JIS-K-7121 with α-alumina as a reference in a nitrogen gas atmosphere using a differential scanning calorimeter (DSC).

[Claim 5]

The use of methacrylic resin composition in non-contact hot plate welding according to any one of claims 1 to 4, wherein the methacrylic resin composition is used as a raw material for a member for a vehicle.

[Claim 6]

The use of methacrylic resin composition in non-contact hot plate welding according to claim 5, wherein the member for the vehicle is at least one member selected from the group consisting of a taillight cover, a headlight cover, and a meter panel.

[Claim 7]

A method for producing a molded article, comprising the steps of:

non-contact heating a molded article (A) with a hot plate so that a surface of the molded article (A) is melted, the molded article (A) comprising a methacrylic resin comprising 80 to 99.9% by mass of a methacrylic acid ester monomer unit and 0.1 to 20% by mass of a unit of at least one additional vinyl monomer copolymerizable with the methacrylic acid ester monomer, wherein the molded article (A) has a melt flow rate (MFR) of 2.5 g/10 min or lower at 230°C at a load of 3.8 kg; and

welding the molded article (A) with an additional molded article (B).

[Claim 8]

The method for producing the molded article according to claim 7, wherein the methacrylic resin is a methacrylic resin which has a weight-average molecular weight of 300000 or lower as measured by gel permeation chromatography (GPC), and which contains 6 to 50% of a component having a molecular weight that is 5 times or more lower than a peak top molecular weight (Mp) obtained from a GPC elution curve.