CLAIMS

1. A method for adjusting a dispersion diameter of a dispersed phase in a thermoplastic resin composition that is obtained by mixing a polyolefin resin, a polyamide resin, and a compatibilizer and has a continuous phase composed of the polyolefin resin and a dispersed phase dispersed in the continuous phase and composed of the polyamide resin characterized in that

the compatibilizer is a polymer having a reactive group that reacts with the polyamide resin, and that

an amount of the polymer to be mixed based on a total of the polyolefin resin and the polyamide resin is varied to adjust a dispersion diameter of the dispersed phase.

2. The method for adjusting a dispersion diameter according to claim 1, wherein the dispersed phase has a fine dispersed phase dispersed in the dispersed phase.

3. The method for adjusting a dispersion diameter according to claim 1 or 2, wherein the compatibilizer is an olefin-based thermoplastic elastomer.

4. The method for adjusting a dispersion diameter according to any one of claims 1 to 3, wherein the reactive group is at least one of an acid anhydride group and a carboxyl group.

5. The method for adjusting a dispersion diameter according to any one of claims 1 to 4, which comprises a step of further melt-kneading a melt-kneaded product, which is obtained by melt-kneading the polyamide resin and the compatibilizer out of the polyolefin resin, the polyamide resin, and the compatibilizer, with the polyolefin resin to obtain the thermoplastic resin composition.

6. A thermoplastic resin composition which is obtained by mixing a polyolefin resin, a polyamide resin, and a compatibilizer having a reactive group that reacts with the polyamide resin and

has a continuous phase composed of the polyolefin resin and a dispersed phase dispersed in the continuous phase and composed of the polyamide resin characterized in that

the dispersed phase has a fine dispersed phase dispersed in the dispersed phase, and

the compatibilizer is an olefin elastomer or styrene elastomer, and

the reactive group is at least one of an acid anhydride group and a carboxyl group, and

when a total of the polyolefin resin, the polyamide resin, and the compatibilizer is taken as 100% by mass, an amount of the compatibilizer is 14% by mass or more but 38% by mass or less, and

a number of the dispersed phase per 10 micrometers square is 100 or more but 450 or less.

7. The thermoplastic resin composition according to claim 6, wherein the dispersed phase has a dispersion diameter of 1300 nm or less.

8. The thermoplastic resin composition according to claim 6 or 7, wherein the Charpy impact strength is 10.6 kJ/m^2 or more but 85 kJ/m^2 or less.