type to tooth type. To provide a dental prostheses with a color tone similar to the color tone of a natural tooth, a precolored calcined body is utilized. A colored calcined body is typically produced by a method of calcining a green body of a composition containing a pigment and zirconia homogeneously mixed (what is called a powder mixing method; for example, Patent Literature 1 and Patent Literature 2). In the powder mixing method, the type and amount of pigment are changed to adjust the composition for a desired color tone, thereby preparing a powder composition containing the pigment and a zirconia powder homogeneously mixed. The powder composition is formed and calcined to prepare a uniformly colored calcined body.

Citation List

Patent Literature

[0004]

PTL 1: International Publication No. 2014/022643

PTL 2: U.S. Patent No. 9962247

PTL 3: International Publication No. 2016/019114

Summary

[0004a]

In an aspect of the present disclosure, there is provided a powder composition comprising: two or more types of zirconia in which a lanthanoid rare-earth element is dissolved; a transition metal element other than zirconium

and hafnium; and a remainder composed of zirconia stabilized only by one or more selected from the group consisting of yttrium, calcium and magnesium, wherein a different lanthanoid rare-earth element is dissolved in each zirconia in which the lanthanoid rare-earth element is dissolved, and a transition metal element content is 1500 ppm or less.

[0004b]

In another aspect of the present disclosure, there is provided a method for producing a calcined body using the powder composition as disclosed herein.

[0004c]

In a further aspect of the present disclosure, there is provided a method for producing a sintered body using the powder composition as disclosed herein.

[0004d]

In another aspect of the present disclosure, there is provided a calcined body comprising a fused particle of a transition metal compound other than zirconium and hafnium, zirconia in which two or more lanthanoid rare-earth elements are dissolved, and zirconia stabilized only by one or more selected from the group consisting of yttrium, calcium and magnesium, wherein the transition metal element other than zirconium and hafnium constitutes 1500 ppm or less.

[0004e]

In a further aspect of the present disclosure, there is

provided a method for producing a sintered body, comprising using the calcined body as disclosed herein.

Technical Problem

[0005]

Calcined bodies with different compositions have not only different color tones but also different processability. On the other hand, calcined bodies are cut