

ALUMINA POWDER, PROCESS FOR ITS PRODUCTION AND RESIN COMPOSITION EMPLOYING IT

ABSTRACT:

5 To provide an alumina powder having an improved flowability, a process for its production, and a resin composition employing it.

An alumina powder which has an α -phase content of at most 40% as measured by the following method, an average circularity of at least 0.95 in each of the particle size range of from 45 to 200 μm and the particle size range of less than 45 μm , and an

10 average particle size of at most 100 μm :

[method for measuring α -phase content]

Powders prepared by mixing α -phase alumina powder and θ -phase alumina powder in mass ratios of 0:10, 5:5 and 10:0, respectively, are subjected to X-ray diffraction measurements, whereupon the integrated intensity of a peak of α -phase detected in the vicinity of $2\theta=43^\circ$ is calculated, and a calibration line of the integrated intensity plotted against the mixing ratio is made; and then, a sample of the alumina powder is subjected to an X-ray diffraction measurement, whereupon the integrated intensity of a peak in the vicinity of $2\theta=43^\circ$ is calculated, and the α -phase content is obtained from the calibration line.

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Figure 1