

AMORPHOUS SILICA POWDER, PROCESS FOR ITS PRODUCTION AND ITS USE

ABSTRACT

5 A resin composition, particularly a sealing material for semiconductors, is provided which has a low viscosity at the time of sealing and has its moldability further improved, even when an inorganic filler is highly filled. Further, an amorphous silica powder suitable for preparation of such a resin composition, and a process for producing such an amorphous silica powder are provided.

10 The amorphous silica powder is characterized in that after having pyridine adsorbed on the amorphous silica powder, the ratio of L/B is at most 0.8, where L is the amount of pyridine desorbed under heating at from 450°C to lower than 550°C, and B is the amount of pyridine desorbed under heating at from 150°C to lower than 250°C. Further, it is preferred that after having pyridine adsorbed on the amorphous silica powder, the proportion of the amount B of pyridine desorbed under heating at from 150°C to lower than 250°C in the total amount A of pyridine desorbed under
15 heating at from 150°C to lower than 550°C, i.e. $(B/A) \times 100\%$, is at least 20%. Further, the amorphous silica powder preferably has a specific surface area of from 0.5 to 45 m²/g, an average particle size of from 0.1 to 60 μm and an average sphericity of at least 0.80.

(no suitable figure)