

ABSTRACT

The present invention relates to lead-free solder in which oxidation of the powder surface with time is prevented and to a process for preparing the same.

If electronic equipment using tin-lead-based solder is disposed as general industrial waste and left to stand in the environment, the lead component in solder dissolves, which gives rise to a problem to the human body. Hence, lead-free solder of tin-zinc-based solder containing no lead is developed intensively. However, tin-zinc-based solder is very susceptible to oxidation so that it tends to exhibit extremely deteriorated wetting or to develop many voids.

The present invention is characterized in that lead-free solder powder having tin-zinc or tin-zinc-bismuth as a major composition and forming an organometallic compound of malonic acid and a metal of the solder alloy powder on the surface of solder alloy powder containing no lead, and a process for preparing the same.