

ABSTRACT

Provided are a tin-containing alloy plating bath being capable of manufacturing a tin-containing alloy plated product suitable for electric and electronic members with excellent anti-oxidation performance, and an electroplating method using the bath. Specifically the bath is a plating bath to deposit a tin-containing alloy on the surface of a substrate, which plating bath contains: (a) a tin compound containing 99.9% by mass to 46% by mass of tin based on entire metal mass in the plating bath; (b) a gadolinium compound containing 0.1% by mass to 54% by mass of gadolinium based on entire metal mass in the plating bath; (c) at least one complexing agent; and (d) a solvent, and the electroplating method uses the tin-containing alloy bath, thus can manufacture a tin-containing alloy plated product having excellent anti-oxidation performance.