

The effect of tris(hydroxymethyl)aminomethane on the stability of chemical copper-plating solutions and process rate

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Abstract

Novel additive is suggested in ethylenediaminetetraacetate solution for chemical copper plating. The additive enables to raise a copper deposition rate more than twice and to improve a solution stability. The reaction orders for the main solution components of copper plating. Effective activation energy and constant of process rate are estimated. Empiric equation is obtained which allows to define the process rate depending upon component concentration and temperature.
