

عنوان مقاله:

KINETICS OF OXIDE FORMATION ON COPPER ROD

محل انتشار:

نهمین کنگره ملی مهندسی شیمی ایران (سال: 1383)

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خلاصه مقاله:

Oxidation behavior of the copper rod of 8mm diameter is studied in atmospheric air. According to the operating conditions in the manufacturing process at Sarcheshmeh Copper Complex, the experimental measurements were carried out in the temperature range of 300 to 700 oC and the oxidation time between 1 to 5 minutes. The results show that the oxidation rate follows the parabolic law with activation energy of about 17.5 KJ/mole. This activation energy is much lower than previous studies of other investigators, which may be due to either rapid transport of ions and defects through short-circuit channels or migration of oxygen through interconnecting pores.

کلمات کلیدی:

Copper rod, Oxidation, Kinetics

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