عنوان مقاله:

Evaluation of corrosion inhibition of 2-mercaptobenzoxazole on mild steel in 0.1 M NaCl solution

محل انتشار:

ششمین کنگره بین المللی رنگ و پوشش (سال: 1394)

تعداد صفحات اصل مقاله: 2

نویسندگان:

S. Alinejad - *School of Metallurgy and Materials Engineering, Faculty of Engineering, University of Tehran, Tehran*

R. Naderi - *School of Metallurgy and Materials Engineering, Faculty of Engineering, University of Tehran, Tehran*

M. Mahdavian - *Surface Coating and Corrosion Department, Institute for Color Science and Technology, Tehran*

خلاصه مقاله:

The effect of 2-mercaptobenzoxazole (MBO) concentration on the corrosion of mild steel immersed in 0.1 M NaCl was evaluated in this work. Through taking advantage of electrochemical impedance spectroscopy (EIS), we could determine the inhibitor content in which the most effective inhibition was provided. With increasing the inhibitor concentration, an increase in the absolute impedance at low frequencies in Bode plot and the semicircle diameter at Nyquist plot was detected. Moreover, regardless of the concentration the parameters extracted from AC impedance .spectra indicated the effectiveness of the inhibitor

کلمات کلیدی:

Mild steel- Corrosion inhibitor- Neutral solution- Mercaptobenzoxazole- EIS