

عنوان مقاله:

Corrosion Inhibition by Eucalyptus Bark Extract in Wastewater Refiner from Crude Oil

محل انتشار:

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خلاصه مقاله:

The corrosion inhibition of low carbon steel (API 5L X52) in wastewater refiner from crude oil by diethyl ether extract of eucalyptus bark has been studied in relation to four concentrations of the inhibitor include 30,40,50 and 60 ppm at four temperatures 40, 50, 60 and 70°C using electrochemical measurement (potentiostat polarization). FTIR spectra was recorded to the eucalyptus bark powder to detection the active groups. Inhibition efficiencies were calculated and the results show that the 30ppm of eucalyptus bark extract gave the best inhibition which ranged from 70.73 to 74.58%. Polarization curves indicate that the green inhibitor is a mixed type inhibitor, which decreases both Tafel slopes.

کلمات کلیدی:

corrosion inhibitor, green inhibitor, wastewater refiner from crude oil, API 5L X52 , Tafel extrapolation, potentiostat

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