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INHIBITION STUDY OF AL 5083 CORROSION IN 1 M HYDROCHLORIC ACID SOLUTION BY 2-CHLORO 3-FORMYL QUINOLINE

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ABSTRACT

The corrosion inhibition study of 2-chloro 3-formyl quinoline was conducted for Al5038 corrosion in 1 M hydrochloric acid solution at a Laboratory temperature by electrochemical measurements. Inhibition efficiency increases with the increase of inhibitor concentration. The polarization measurement reveals that the inhibitor acts as the mixed type and this inhibition effect is attributed to the adsorption of the inhibitor on the surface of Al 5083 from the bulk of the solution. Scanning electron microscopy (SEM) micrographs were used to investigate the surface morphology of the Al sample in presence and absence of inhibitor.

KEYWORDS: 2-Chloro 3-formyl quinoline Al 5083 Acid Media