

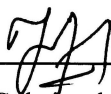
**SODIUM BENZOATE AS ALUMINIUM CORROSION  
INHIBITOR IN ACIDIC MEDIA**

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**Final Year Project Report Submitted in  
Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science (Hons.) Applied Chemistry  
in the Faculty of Applied Sciences  
Universiti Teknologi MARA**

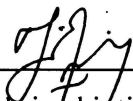
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This Final Year Project Report entitled "**Sodium Benzoate as Aluminium Corrosion Inhibitor in Acidic Media**" was submitted by, Abdul Hady bin Abu Bakar in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Applied Chemistry, in the Faculty of Applied Science, and was approved by



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## **ABSTRACT**

### **SODIUM BENZOATE AS ALUMINIUM CORROSION INHIBITOR IN ACIDIC MEDIA**

Two different experimental methods are used in order to confirm the ability of sodium benzoate to inhibit the corrosion on aluminium in diluted sulfuric acid and diluted hydrochloride acid. The inhibition efficiency and corrosion rate of sodium benzoate is determined using polarization method and weight loss measurement. Sodium benzoate behaved as cathodic corrosion inhibitor and mixed corrosion inhibitor in diluted sulfuric acid and diluted hydrochloride acid respectively. Both results from polarization method and weight loss measurement showed that the highest inhibition efficiency was achieved at concentration of 800ppm of sodium benzoate.