

**EFFECT OF DIFFERENT VOLUME RATIO ON RESISTIVITY,  
DIELECTRIC CONSTANT AND LOSS FACTOR OF PURE  
EPOXY RESIN**

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## **ABSTRACT**

In this thesis, epoxy resin based composites with different volume ratio were formed. The relationship between volume ratio change as well as resistivity, relative permittivity and loss factor were investigated. The results showed that, resistivity decrease when hardener (Part A) content was more than material (Part B) itself after 500V voltage applied on it in 60 seconds. In addition, all sample test decrease in permittivity as the frequency reaches 10k Hz. Yet, loss factor is about to increase when increasing the frequency. Thus, resistivity, permittivity and loss factor of insulation are depending on volume ratio change.

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