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**Critical Fluctuations Binary Mixture Nitro ethaneiso octane according Sound Absorption**

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**Abstract**

The temperature dependence of the absorption at critical composition and above critical temperature Tc for the binary mixture nitro ethane-isooctane at 5, 7, 10, 15, 21, and 25 MHz frequencies is plotted. The frequency dependence of the absorption (α*f-2*) for the same critical binary mixture at different temperaturesabove critical temperature is shown. In addition, the linear relation of (α *f-2*) versus𝑓−1.06 shows an excellent agreement with the dynamic scaling theory of Ferrelland Bhattacharjee. The experimental values of ($\frac{∝\_{fl}f^{-2}}{∝\_{c}f^{-2}}$) for nitro ethane isooctane binary mixture were plotted as a function of reduced frequency ω and it showed a good agreement with the theoretical scaling function *F*(ω).