

## Is It Important to Measure the Volumetric Mass Density of Nanofluids?

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**Abstract :** The present study aims to measure the volumetric mass density of NiPd-heptane nanofluids synthesized using a one-step method known as thermal decomposition of metal-surfactant complexes. The particle concentration is up to 7.55 g/l and the temperature range of the experiment is from 20°C to 50°C. The measured values were compared with the mixture theory and good agreement between the theoretical equation and measurement were obtained. Moreover, the available nanofluids volumetric mass density data in the literature is reviewed.

**Keywords :** NiPd nanoparticles, nanofluids, volumetric mass density, stability

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