



# The Empirical Studies for the Piscine Boiling Heat Transfer of Horizontal Augment Tube

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## Abstract

In this study the pool boiling heat transfer of R134a-oil mixture was experimentally studied at the oil 'concentration of 100ppm (0.01%) and 50ppm (0.005%) at the tube outsides. Two types of horizontal enhance tubes with different sizes and structures were selected in the experiment the total heat transfer performance and the influence of the lubricant oil concentration on the heat transfer were obtained. The physical interpretation was given about the mixture of viscosity and surface tension, which lays the fountain for carrying out relative researches.

*Keywords:* piscine boiling; heat transfer; horizontal augment tube; R134a