

## Estimation of the Refrigeration Performance of Ternary Mixtures for Developing R-502 and R-404a Alternatives

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Much effort has been made to find suitable replacements for low temperature refrigerants such as R-502 and R-404a due to their high Ozone Depletion Potentials. In this work, some ternary mixtures that were primarily evaluated with refrigeration cycle simulation program and selected as R-502 and R-404a alternative candidates will be introduced. The refrigeration performance testing for R-502, R-404a and these mixtures at same condition was carried out by using a refrigerant performance calorimeter. The comparison of performance test results indicated that several mixtures could be suggested as R-502 and R-404a alternatives.