

Investigation of the Vapour Liquid Equilibrium Behaviour of blends comprising R125, R134a and R600 or R600a.

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ABSTRACT

With the phase-out of HCFCs being accelerated in some regions of the World, most notably Europe, many studies have been performed on four alternatives to replace R22 i.e. R404A, R407C, R410A and R417A. These blends comprise two or three of R32, R125, R134a, 143a, and R600. This range of blends has shown that replacement of R22 in all its applications is not easily achieved by the use of a single product or even different compositions of the same components.

This paper details the results of trials for three blends based on the same components which give improved performances compared to the current alternatives proposed. The blends, suitable for use across the R22 application range, have zero ozone depletion potential, are non-flammable and have been optimised performance for low, medium and high temperature applications.