MAXWELL FACTOR FOR GASEOUS 2.3.3.3-TETRAFLUOROPROPENE AND ZIS-1.3.3.3-TETRAFLUOROPROPENE AT ZERO DENSITY

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In this study we focused on the Maxwell factor of fluorinated propene isomers - 2,3,3,3-tetrafluoropropene and zis-1,3,3,3-tetrafluoropropene last years receiving considerable attention as the next generation of refrigerants. Fluorinated propene isomers contain carbon-carbon double bound. The advantage of both refrigerants is a low global warming potential value of 4 and 6 respectively. This paper deals with the temperature dependence of thermal conductivity in the limit of zero density for dilute gases. A theoretically based correlation formalism has been examined according to the kinetic theory of Mason-Monchik-Parker using a set of trial functions and related to the translational and integral effective collisions that incorporate the information concerning intermolecular pair potential and binary collisions. The results have correlated using the Maxwell factor. The analysis of quantities for practical purposes which are related to the thermal conductivity and viscosity has been made.