**Diffusion of hard sphere fluids in a disordered porous media from generalized Enskog theory**

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We present a generalization of the Enskog kinetic theory for hard sphere fluids in a disordered porous media. In this approach the properties of considered model are defined by the contact values of fluid-matrix and fluid-fluid pair distribution functions. In this report the corresponded contact values of pair distribution functions are obtained from the scaled particle theory. The developed theory is applied for the investigation of the diffusion of hard sphere fluids in a disordered porous media for two types of porous media, namely for a hard-sphere matrix and for an overlapping hard-sphere matrix. The effects of fluids density, matrix porosity and morphology, fluid to matrix sphere size ratio on the self-diffusion coefficient are illustrated. Some comparison with computer simulations data is presented. The obtained results are generalize for the mixture of hard sphere fluids in a disordered porous media and corresponded self-diffusion coefficients are studied in dependence from the size ratio of different fluid species.