# FREQUENCY DISPERSION OF THE SHEAR AND BULK VISCOSITY COEFFICIENTS OF LIQUID ARGON AS FUNCTIONS OF STATE PARAMETERS

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S u m m a r y

Experimental and theoretical works studying the shear $\eta_S$ and bulk $\eta_V$ viscosity coefficients of simple liquids and the optimal choice of the intermolecular interaction potential $\Phi(|\mathbf{r}|)$ and the radial distribution function $g(|\mathbf{r}|)$ are briefly analyzed. The last are used to determine the friction coefficient $\beta$ and the relaxation times $\tau$ and $\tau_0$ as functions of the temperature $T$ and the density $\rho$, as well as to numerically calculate the viscosity coefficients $\eta_S(\omega)$ and $\eta_V(\omega)$ in wide ranges of state parameters and frequencies. The obtained results are in satisfactory quantitative agreement with the theoretical and experimental data for liquid argon reported in the literature.