The errors in viscosity measurements by the oscillating cup method were calculated as a function of the limit of accuracy imposed by the uncertainty in determining the constants of the oscillating system $R$, $I$, $T_0$, $\delta_0$ and the limit of precision resulting from errors in determining the experimental parameters $\delta$, $T$, $h$, $\rho$.

Thus, by evaluating the fractional error of each of the parameters and implicitly its distinct contribution to the total standard error, it was established that the “meniscus error” $\Delta h$, which is difficult to be controlled or avoided, represents the major source of imprecision of oscillating cup viscometers.

Key words: Viscosity; Molten Salts; Oscillating Cup Viscometer; Error Analysis.