## characteristic ratio

## in polymers

The ratio of the mean-square end-to-end distance, $\left\langle r^{2}\right\rangle_{0}$, of a linear polymer chain in a theta state to $N \cdot L^{2}$, where $N$ is the number of rigid sections in the main chain, each of length $L$; if all of the rigid sections are not of equal length, the mean-square value of $L$ is used, i.e.

$$
L^{2}=\sum_{i} \frac{L_{i}^{\overline{2}}}{N}
$$

In simple single-strand chains, the bonds are taken as the rigid sections. The recommended symbol is: $C_{N}\left(C_{\infty}\right.$ when $\left.N \rightarrow \infty\right)$.

## Source:

Purple Book, p. 49

