

## steric factor

*in polymers*

The ratio,  $\sigma$ , of the root-mean-square end-to-end distance of a polymer chain with unperturbed dimensions,  $\langle r^2 \rangle_0^{1/2}$ , to that of a freely rotating chain with the same structure,  $\langle r^2 \rangle_{0,f}^{1/2}$ , i.e.  $\sqrt{\frac{\langle r^2 \rangle_0}{\langle r^2 \rangle_{0,f}}}$ , in the limit of infinite chain length. The steric factor reflects the effect of hindrance to free rotation.

**Source:**

Purple Book, p. 50