

intrinsic viscosity

Synonym: limiting viscosity number

of a polymer

The limiting value of the reduced viscosity, $\frac{\eta_i}{c}$ or the inherent viscosity, η_{inh} , at infinite dilution of the polymer, i.e.

$$[\eta] = \lim_{c \rightarrow 0} \frac{\eta_i}{c} = \lim_{c \rightarrow 0} \eta_{\text{inh}}$$

Notes:

1. This term is also known in the literature as the Staudinger index.
2. The unit must be specified; $\text{cm}^3 \text{g}^{-1}$ is recommended.
3. This quantity is neither a viscosity nor a pure number. The term is to be looked on as a traditional name. Any replacement by consistent terminology would produce unnecessary confusion in the polymer literature. Synonymous with limiting viscosity number.

Source:

Purple Book, p. 63