A First Course on Kinetics and Reaction Engineering Unit 28. Choosing a Reactor Type

Definitions

commodity chemical - a reagent that is produced in very high volume and sells for a relatively low price. specialty chemical - a reagent for which the market is small leading to low production rates and relatively high prices

Nomenclature

 $\mathit{S}_{\mathit{D}/\mathit{U}}$ instantaneous selectivity parameter for parallel reactions

 k_i rate coefficient for the reaction that forms species i

 r_i rate of the reaction that forms species i

Equations

$$S_{D/U} = \frac{r_D}{r_U}$$
 (28.1)