

selectivity factor, S_f

A quantitative representation of *selectivity* in *aromatic substitution reactions* (usually *electrophilic*, for monosubstituted benzene derivatives). If the *partial rate factor*, f , expresses the reactivity of a specified position in the aromatic compound PhX relative to that of a single position in benzene, then the selectivity factor S_f (expressing discrimination between *p*- and *m*-positions in PhX) is defined as:

$$S_f = \log (f_p^X / f_m^X)$$

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