

SELECTIVITY SCALES OF AMBIPHILE CARBENE INTER-MEDIATE

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The carbene selectivity for ambiphile carbenes has been correlated with the parameter of π -electron character after obtained the reaction rate constants. The carbene selectivity is paralleled the olefinic selectivity of carbene, m_{cxy} . The relative addition rate constants of the ambiphile carbenes decreases along decreasing the reactivity with decreasing the olefinic π -electron donor ability.

The carbene selectivity based on competitive addition method gives a significant meaning to reveal a kind of new scale toward either electron-rich or electron poor alkenes.

The new carbene selectivities are compared with Mayr's N (nucleophilicity) and E (Electrophilicity) values. The results are good agree with each other for the ambiphilic carbenes.

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