

occurred rapidly at room temperature, both with phenols and oximes.

In order to explain the remarkable difference in behaviour of oximes and phenols, we can assume a hypothetical series of processes, for both the oximes and the phenols, and then apply the First Law. Thus, for the addition of an oxime to benzoyl isothiocyanate see Scheme 2.

The equilibrium constant for the addition is given by the product of the above three constants ($K_H K_1 K_2$). For two nucleophiles with identical pK_a 's, K_H and K_1 are the same, and hence K_2 for the oxime must be greater than K_2 for a corresponding phenol, since only in the former case is an adduct formed.

Oximate ions are known to have abnormally high reactivity

(and hence affinity) towards carbon centres, and this defines the α -effect,⁵ the origin of which is discussed in the following communication.

Received, 28th May 1985; Com. 741

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