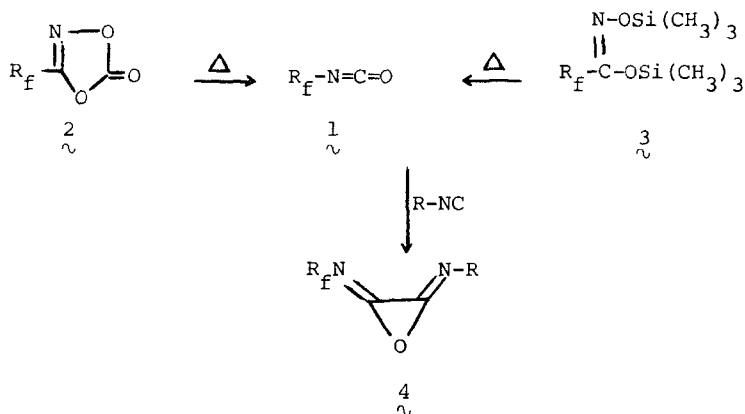


NEW SYNTHESSES AND CHEMISTRY OF PERFLUOROALKYL ISOCYANATES AND NITRILE OXIDES

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New syntheses of perfluoroalkyl isocyanates (1) include pyrolysis of dioxazolones (2) and pyrolysis of disilyl esters of hydroxamic acids (3). Reactions of 1 with alkyl isocyanides give the unusual diimino-oxiranes 4.



Trifluoroacetonitrile oxide (5), an unstable isomer of CF_3NCO , is conveniently prepared from $\text{NH}_2\text{OH}\cdot\text{HCl}$, PCl_5 and trifluoroacetic anhydride. It can be dimerized to give either the expected furoxan dimer 6 or the unusual dioxadiazine dimer 7, reacts with benzonitrile to form a cycloaddition product, and adds nucleophiles in a stereospecific manner to give Z-oximes.

